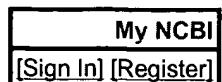
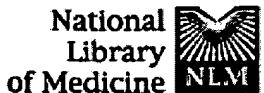


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1: J Bone Miner Res. 2002 Sep;17(9):1604-12.

**JBMR**

**1Alpha,25-dihydroxyvitamin D3 promotes vascularization of the chondro-osseous junction by stimulating expression of vascular endothelial growth factor and matrix metalloproteinase 9.**

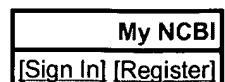
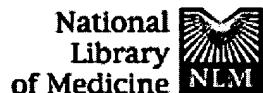
**Lin R, Amizuka N, Sasaki T, Aarts MM, Ozawa H, Goltzman D, Henderson JE, White JH.**

Department of Physiology, McGill University, Montreal, Quebec, Canada.

Vitamin D deficiency results in defects in endochondral bone development characteristic of rickets, which include elongation of the cartilaginous growth plates and disorganization of the primary spongiosa. These defects are caused in part by impaired cartilage mineralization and vascularization of the chondro-osseous junction. Blood vessel invasion of mineralized cartilage is an essential step in endochondral ossification, providing access for cells that degrade cartilage as well as those that form bone. Vascular endothelial growth factor (VEGF) was shown to be a key regulator of this process when infusion of a dominant negative VEGF receptor effectively blocked vascular invasion and endochondral ossification in the growth plates of juvenile mice. Here, we show that the active metabolite of vitamin D 1alpha,25-dihydroxyvitamin D3 [1alpha,25(OH)2D3] directly stimulates transcription of mRNAs encoding VEGF121 and -165 isoforms in the CFK2 chondrogenic cell line. Enhanced VEGF expression also was evident in growth plate chondrocytes and osteoblasts in the tibia of juvenile mice treated systemically with 1alpha,25(OH)2D3. This was seen in conjunction with enhanced expression of matrix metalloproteinase (MMP) 9, which activates VEGF stored in the cartilage matrix, in osteoclastic cells adjacent to the chondro-osseous junction. The alterations in VEGF and MMP-9 expression were accompanied by enhanced vascular invasion of mineralized cartilage, as assessed by CD31 immunoreactivity. These results provide evidence that 1alpha,25(OH)2D3 signaling stimulates VEGF and MMP-9 gene expression and promotes neovascularization of the epiphyseal growth plate in vivo through increased availability of active growth factor.

PMID: 12211430 [PubMed - indexed for MEDLINE]

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1: Int J Exp Pathol. 1999 Oct;80(5):235-50.

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**New vessels, new approaches: angiogenesis as a therapeutic target in musculoskeletal disorders.**

**Ballara SC, Miotla JM, Paleolog EM.**

Kennedy Institute of Rheumatology, London, United Kingdom.

Musculoskeletal disorders such as rheumatoid arthritis (RA) and osteoarthritis are a common cause of pain and disability. The vasculature is an important component of the musculoskeletal system, and vascularization is a key event in the development of normal cartilage and bone. By promoting the delivery of nutrients, oxygen and cells, blood vessels help maintain the structural and functional integrity of joints and soft tissue and may facilitate tissue repair and healing. The identification of pro-angiogenic mediators such as vascular endothelial growth factor (VEGF) has led to the development of antiangiogenic therapies for the treatment of neoplastic diseases. The important role of angiogenesis, and especially VEGF, in the pathogenesis of joint disorders such as RA suggests that antiangiogenic therapy may be a useful adjunct to existing approaches in RA.

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1: Am J Pathol. 1997 Jul;151(1):13-23.

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## Vascular endothelial growth factor and ocular neovascularization.

**Miller JW.**

Laser Laboratory, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston 02114, USA.

Okamoto et al have developed an extremely useful and interesting model of retinal and subretinal neovascularization. Using molecular techniques, they have developed a transgenic model driven by overexpression of VEGF, a growth factor demonstrated to play an important role in neovascularization in many ocular diseases. They have been able to demonstrate that VEGF overexpression is sufficient to cause intraretinal and subretinal neovascularization. The mouse model is relatively cheap and reliable, does not require any exogenous agent, and has many characteristics of clinical intraocular neovascularization. The new vessels develop in the outer retina and subretinal space and have a characteristic histological appearance. They leak fluorescein on angiography, demonstrating their similarity to human disease and allowing identification and grading of neovascularization *in vivo*. The model can be used to investigate molecular mechanisms of VEGF-dependent neovascularization, with applications beyond ocular eye disease. The model can also be used to study anti-angiogenic agents that have the potential to treat common blinding diseases such as age-related macular degeneration. Okamoto et al have made a substantial contribution to the angiogenesis field with this work, and one looks forward to future investigations.

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## **[Cell biology of intraocular vascular diseases]**

[Article in Japanese]

**Ishibashi T.**

Department of Ophthalmology, Graduate School of Medical Sciences, Kyushu University.

Diabetic retinopathy (DR) still remains the leading cause of blindness in the working population of Japan and western world, though therapies such as retinal photocoagulation and vitrectomy can be remarkably effective when administered at an appropriate stage in the disease process. Consequently, there is a need for further investigation of the pathogenesis of DR to develop better therapy. DR is characterized by gradually progressive alterations in the retinal microvasculature, leading to three fundamental morbidities: 1. vascular hyperpermeability, 2. vascular occlusion, and 3. neovascularization. Recent studies have revealed that hyperglycemia causes several metabolic disorders which cause DR directly or indirectly through the abnormal expression of cytokines including vascular endothelial growth factor (VEGF). In this study, we performed precise tests of the correlation between intraocular VEGF and the three fundamental changes in the diabetic retina mentioned above. Ultrastructural study of the human retina revealed that two major pathways are responsible for hyperpermeability of diabetic retinal vessels, i.e., intercellular or paracellular transport (opening of the tight junctions) and intracellular or transcellular transport (caveolae, intracytoplasmic vesicles, and fenestration). All these pathways were induced by intravitreal injection of VEGF. The major trigger of VEGF overexpression is tissue ischemia caused by vascular occlusion. However, the retinas from the eyes with background DR revealed increased expression of VEGF without apparent incidence of vascular occlusion. We have identified accumulation of advanced glycation end products (AGEs) in these retinas, and found that AGEs are a major stimulus for VEGF overexpression in background DR. Retinal vascular occlusion was caused by thrombus formation primarily in the capillary vessels. Thrombi mainly consisted of fibrin, platelets, and leucocytes in the early stage of their formation, and glial cells and macrophages were also involved in the later stage. The blood coagulation process plays an important role in fibrin formation in thrombi. The expression of tissue factor (TF), an initiator of extrinsic blood coagulation, was upregulated by VEGF in retinal vascular endothelial cells (REC). In addition, AGEs were also thrombogenic through the induction of TF expression and suppression of the expression of prostacyclin stimulating factor (PSF), which stimulate

prostacyclin synthesis in vascular endothelial cells. These findings suggest that AGEs, VEGF, and TF could interact in a vicious circle because AGEs and VEGF could induce retinal vascular occlusion which results in further increase in VEGF expression. Intravitreal injection of VEGF could induce retinal neovascularization. VEGF stimulates vascular endothelial cell proliferation by binding to a specific receptor named kinase insert domain-containing receptor/fetal liver kinase (KDR/FIk-1, KDR). AGEs and basic fibroblast growth factor (bFGF) induced expression of KDR in REC, and a transcription factor Sp 1 was involved in this process. Since the expression of KDR as well as VEGF was already upregulated in the retinas with background DR, VEGF appeared to start to induce the proliferative changes long before the actual onset of proliferative DR. These findings indicated that VEGF and its receptor system plays a pivotal role all through the disease process of DR. We considered that amelioration of the activated VEGF and its receptor system could lead to the development of new therapy for DR. We have developed two novel methods to prevent retinal neovascularization by inhibiting VEGF and its receptor system. 1. An insulin sensitizing agent (troglitazone) inhibited proliferation, migration, and in vitro tube formation by REC as well as oxygen-induced retinal neovascularization in a mouse model. Thus, glycemic control by troglitazone could reduce the incidence of neovascularization in diabetic eyes. 2. (ABSTRACT TRUNCATED)

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## [Cell biology of intraocular vascular diseases]

[Article in Japanese]

Ishibashi T.

Department of Ophthalmology, Graduate School of Medical Sciences, Kyushu University.

Diabetic retinopathy (DR) still remains the leading cause of blindness in the working population of Japan and western world, though therapies such as retinal photocoagulation and vitrectomy can be remarkably effective when administered at an appropriate stage in the disease process. Consequently, there is a need for further investigation of the pathogenesis of DR to develop better therapy. DR is characterized by gradually progressive alterations in the retinal microvasculature, leading to three fundamental morbidities: 1. vascular hyperpermeability, 2. vascular occlusion, and 3. neovascularization. Recent studies have revealed that hyperglycemia causes several metabolic disorders which cause DR directly or indirectly through the abnormal expression of cytokines including vascular endothelial growth factor (VEGF). In this study, we performed precise tests of the correlation between intraocular VEGF and the three fundamental changes in the diabetic retina mentioned above. Ultrastructural study of the human retina revealed that two major pathways are responsible for hyperpermeability of diabetic retinal vessels, i.e., intercellular or paracellular transport (opening of the tight junctions) and intracellular or transcellular transport (caveolae, intracytoplasmic vesicles, and fenestration). All these pathways were induced by intravitreal injection of VEGF. The major trigger of VEGF overexpression is tissue ischemia caused by vascular occlusion. However, the retinas from the eyes with background DR revealed increased expression of VEGF without apparent incidence of vascular occlusion. We have identified accumulation of advanced glycation end products (AGEs) in these retinas, and found that AGEs are a major stimulus for VEGF overexpression in background DR. Retinal vascular occlusion was caused by thrombus formation primarily in the capillary vessels. Thrombi mainly consisted of fibrin, platelets, and leucocytes in the early stage of their formation, and glial cells and macrophages were also involved in the later stage. The blood coagulation process plays an important role in fibrin formation in thrombi. The expression of tissue factor (TF), an initiator of extrinsic blood coagulation, was upregulated by VEGF in retinal vascular endothelial cells (REC). In addition, AGEs were also thrombogenic through the induction of TF expression and suppression of the expression of prostacyclin stimulating factor (PSF), which stimulate

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1: J Clin Invest. 1999 Dec;104(11):1613-20.

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**VEGF antagonism reduces edema formation and tissue damage after ischemia/reperfusion injury in the mouse brain.**

**van Bruggen N, Thibodeaux H, Palmer JT, Lee WP, Fu L, Cairns B, Tumas D, Gerlai R, Williams SP, van Lookeren Campagne M, Ferrara N.**

Department of Neuroscience, Genentech Inc., South San Francisco, California 94080, USA. vanbruggen.nick@gene.com

VEGF is mitogenic, angiogenic, and a potent mediator of vascular permeability. VEGF causes extravasation of plasma protein in skin bioassays and increases hydraulic conductivity in isolated perfused microvessels. Reduced tissue oxygen tension triggers VEGF expression, and increased protein and mRNA levels for VEGF and its receptors (Flt-1, Flk-1/KDR) occur in the ischemic rat brain. Brain edema, provoked in part by enhanced cerebrovascular permeability, is a major complication in central nervous system pathologies, including head trauma and stroke. The role of VEGF in this pathology has remained elusive because of the lack of a suitable experimental antagonist. We used a novel fusion protein, mFlt(1-3)-IgG, which sequesters murine VEGF, to treat mice exposed to transient cortical ischemia followed by reperfusion. Using high-resolution magnetic resonance imaging, we found a significant reduction in volume of the edematous tissue 1 day after onset of ischemia in mice that received mFlt(1-3)-IgG. 8-12 weeks after treatment, measurements of the resultant infarct size revealed a significant sparing of cortical tissue. Regional cerebral blood flow was unaffected by the administration of mFlt(1-3)-IgG. These results demonstrate that antagonism of VEGF reduces ischemia/reperfusion-related brain edema and injury, implicating VEGF in the pathogenesis of stroke and related disorders.

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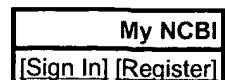
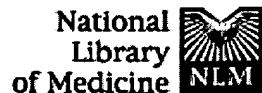
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## Angiogenesis in endometriosis and angiogenic factors.

**Fujimoto J, Sakaguchi H, Hirose R, Wen H, Tamaya T.**

Department of Obstetrics and Gynecology, Gifu University School of Medicine, Gifu, Japan.

Among angiogenic factors, VEGF secreted from activated macrophages under the influence of ovarian steroids, IL-8 expressed in endometrial stromal cells, and basic FGF expressed in endometriotic tissue and PD-ECGF expressed in lining epithelial cells independently of the sex steroid milieu might contribute to the characteristic advancement of angiogenic lesions in endometriosis in individual manners.

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1: Hum Reprod Update. 2000 Jan-Feb;6(1):45-55.

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## Vascular endothelial growth factor and endometriotic angiogenesis.

**McLaren J.**

Department of Obstetrics and Gynaecology, University of Leicester, Faculty of Medical and Biological Sciences, UK.

Peritoneal endometriosis is a significant debilitating gynaecological problem of widespread prevalence. It is now generally accepted that the pathogenesis of peritoneal endometriosis involves the implantation of exfoliated endometrium. Essential for its survival is the generation and maintenance of an extensive blood supply both within and surrounding the ectopic tissue. The vascular endothelial growth factor (VEGF) family of angiogenic molecules is involved in both physiological angiogenesis, and a number of pathological conditions that are characterized by excessive angiogenesis. Increasing evidence suggests that the VEGF family may also be involved with both the aetiology and maintenance of peritoneal endometriosis. Sources of this factor include the eutopic endometrium, ectopic endometriotic tissue and peritoneal fluid macrophages. Important to its aetiology is the correct peritoneal environment in which the exfoliated endometrium is seeded and implants. Established ectopic tissue is then dependent on the peritoneal environment for its survival, an environment that supports angiogenesis. Our increasing knowledge of the involvement of the VEGF family in endometriotic angiogenesis raises the possibility of novel approaches to its medical management, with particular focus on the anti-angiogenic control of the action of VEGF.

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1: **Onkologie.** 2001 Sep;24 Suppl 5:75-80.

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## [Angiogenesis in patients with hematologic malignancies]

[Article in German]

**Mesters RM, Padro T, Steins M, Bieker R, Retzlaff S, Kessler T, Kienast J, Berdel WE.**

Medizinische Klinik und Poliklinik A, Universitätsklinikum Münster, Germany.  
mesters@uni-muenster.de

Angiogenesis in Patients with Hematologic Malignancies The importance of angiogenesis for the progressive growth and viability of solid tumors is well established. Emerging data suggest an involvement of angiogenesis in the pathophysiology of hematologic malignancies as well. Recently, we and others have reported increased angiogenesis in the bone marrow of patients with acute myeloid leukemia (AML) and normalization of bone marrow microvessel density when patients achieved a complete remission (CR) after induction chemotherapy. Tumor angiogenesis depends on the expression of specific mediators that initiate a cascade of events leading to the formation of new microvessels. Among these, VEGF (vascular endothelial growth factor), FGF (fibroblast growth factor) and angiopoietins play a pivotal role in the induction of neovascularization in solid tumors. These cytokines stimulate migration and proliferation of endothelial cells and induce angiogenesis in vivo. Recent data suggest an important role for these mediators in hematologic malignancies as well. Isolated AML blasts overexpress VEGF and VEGF receptor 2. Thus, the VEGF/VEGFR-2 pathway can promote the growth of leukemic blasts in an autocrine and paracrine manner. Therefore, neovascularization and angiogenic mediators/receptors may be promising targets for anti-angiogenic and anti-leukemic treatment strategies. The immunomodulatory drug thalidomide inhibits angiogenesis in animal models. Moreover, it has significant activity in refractory multiple myeloma. In a current phase II study for patients with primary refractory or relapsed multiple myeloma using a combination of thalidomide with hyperfractionated cyclophosphamide and dexamethasone (Hyper-CDT), we observed a partial remission in 12 of 14 evaluable patients (86%). Thus, this combination seems to be very potent. Furthermore, we evaluated the safety and efficacy of thalidomide in patients with AML not qualifying for intensive cytotoxic chemotherapy. 20 patients aged 58-85 (median 69) years were recruited to this phase I/II study and were treated with a dose of 200-400 mg per os daily for a duration of 1-40 (median 6) weeks, dependent on the individual tolerability of the drug. In 4 patients

we observed a partial response (PR - defined as more than 50% reduction in leukemic blast infiltration in the bone marrow). This was accompanied by an increase in platelet counts and hemoglobin values. One additional patient showed a significant improvement of peripheral blood counts without fulfilling the criteria of a PR. In parallel, we observed a significant decrease in microvessel density in these 5 patients during treatment with thalidomide. In conclusion, thalidomide seems to have anti-angiogenic as well as anti-leukemic activity in AML. The VEGF/VEGFR-2 pathway seems to play an important role in AML. Therefore, receptor tyrosine kinase inhibitors like SU5416 or SU6668 are currently evaluated in the context of phase II studies in AML. We could recently induce a stable remission in a patient with second relapse of her AML refractory towards chemotherapy by administration of SU5416 (compassionate use), a tyrosine kinase inhibitor of VEGFR-2 and ckit. Current and future studies will clarify the role of anti-angiogenic treatment strategies in AML and other hematologic malignancies. Copyright 2001 S. Karger GmbH, Freiburg

Publication Types:

- [Review](#)
- [Review, Tutorial](#)

PMID: 11600818 [PubMed - indexed for MEDLINE]

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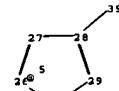
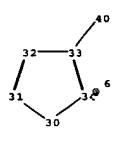
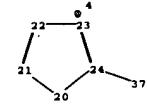
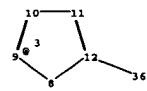
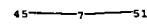
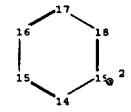
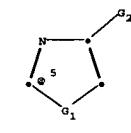
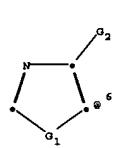
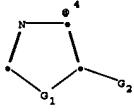
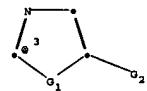
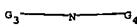
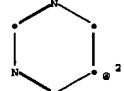
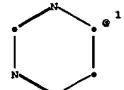
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Oct 18 2005 10:52:14



chain nodes :

7 36 37 39 40 45 51

ring nodes :

1 2 3 4 5 6 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23 24 25 26 27  
28 29 30 31 32 33 34

chain bonds :

7-45 7-51 12-36 24-37 28-39 33-40

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 8-12 9-10 10-11 11-12 14-15 14-19 15-16 16-17  
17-18 18-19 20-21 20-24 21-22 22-23 23-24 25-26 25-29 26-27 27-28 28-29 30-31  
30-34 31-32 32-33 33-34

exact/norm bonds :

7-45 7-51 8-9 8-12 9-10 10-11 11-12 12-36 20-21 20-24 21-22 22-23 23-24 24-37  
25-26 25-29 26-27 27-28 28-29 28-39 30-31 30-34 31-32 32-33 33-34 33-40

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19

isolated ring systems :

containing 1 : 8 : 14 : 20 : 25 : 30 :

G1:O,S,N

G2:CN,Cl,Br,F,I,Cy

G3:[\*1], [\*2]

G4:[\*3], [\*4], [\*5], [\*6]

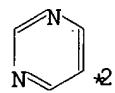
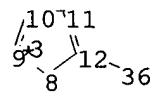
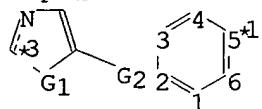
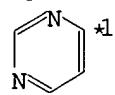
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12:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom  
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33:Atom

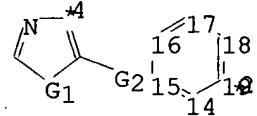
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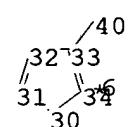
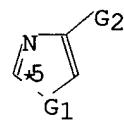
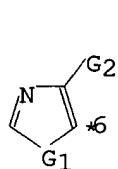
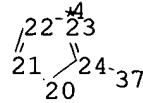
Uploading C:\Program Files\Stnexp\Queries\10677687.str



G3—N—G4



45—7—51



chain nodes :

7 36 37 39 40 45 51

ring nodes :

1 2 3 4 5 6 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23 24 25  
26 27 28 29 30 31 32 33 34

chain bonds :

7-45 7-51 12-36 24-37 28-39 33-40

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 14-15 14-19 15-16  
16-17 17-18 18-19 20-21 20-24 21-22 22-23 23-24 25-26 25-29 26-27 27-28  
28-29 30-31 30-34 31-32 32-33 33-34

exact/norm bonds :

7-45 7-51 8-9 8-12 9-10 10-11 11-12 12-36 20-21 20-24 21-22 22-23 23-24  
24-37 25-26 25-29 26-27 27-28 28-29 28-39 30-31 30-34 31-32 32-33 33-34  
33-40

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19

isolated ring systems :

containing 1 : 8 : 14 : 20 : 25 : 30 :

G1:O,S,N

G2:CN,Cl,Br,F,I,Cy

G3:[\*1],[\*2]

G4:[\*3],[\*4],[\*5],[\*6]

Match level :

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1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom
21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom
30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 36:CLASS 37:CLASS 39:CLASS 40:CLASS
45:CLASS 51:CLASS
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L1 STRUCTURE uploaded

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L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 20684 TO ITERATE
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9.7% PROCESSED 2000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01
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FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 405072 TO 422288
PROJECTED ANSWERS: 14 TO 398
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L2 1 SEA SSS SAM L1

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FULL SCREEN SEARCH COMPLETED - 416205 TO ITERATE
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L4 7 L3
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10/677,687

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:756716 CAPLUS  
 DN 141:277615  
 TI Preparation of 5-phenylthiazoles as phosphatidylinositol 3-kinase (Pi3 kinase) inhibitors  
 IN Bloomfield, Graham Charles; Bruce, Ian; Leblanc, Catherine; Oza, Mrinalini Sachin; Whitehead, Lewis  
 PA Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
 SO PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PRAI GB 2003-5152 A 20030306

OS MARPAT 141:277615

AB The title compds. [I; R1 = (un)substituted 5-6 membered heterocycll ring containing nitrogen and optionally further heteroatoms; R2 = alkyl, halo; R3 = Ph, halo, alkoxy, alkylcarbonyl, etc.; R4, R5 = H, alkyl, 'alkoxy optionally substituted by a 5-6 membered heterocyclic ring, etc.], useful for treating diseases mediated by phosphatidylinositol 3-kinase, were prepared E.g., a multi-step synthesis of 4-[4-methyl-2-(pyrazin-2-ylamino)thiazol-5-yl]benzenesulfonamide, starting from aminopyrazine, was given. The exemplified compds. I have IC50 values below 0.60  $\mu$ M against Pi3 kinase. Pharmaceutical compns. that contain the compds. I and processes for preparing the compds. I are also described.

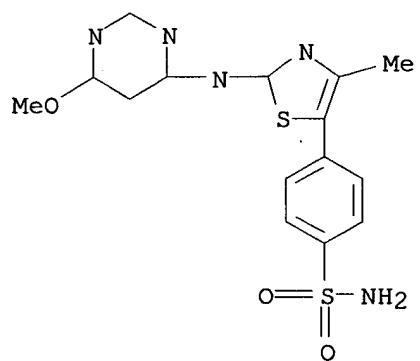
IT 758715-08-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 5-phenylthiazoles as phosphatidylinositol 3-kinase (Pi3 kinase) inhibitors)

RN 758715-08-1 CAPLUS

CN Benzenesulfonamide, 4-[2-[(6-methoxy-4-pyrimidinyl)amino]-4-methyl-5-thiazolyl]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

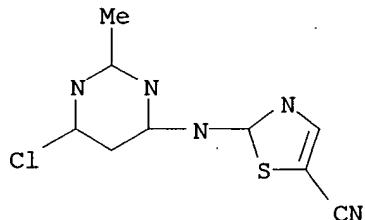
L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:412750 CAPLUS  
 DN 140:423687  
 TI Preparation of thiazolylamino-substituted pyrimidines as kinase inhibitors  
 IN Hartman, George D.; Hoffman, Jacob M.; Smith, Anthony M.; Tucker, Thomas J.  
 PA Merck & Co., Inc., USA  
 SO PCT Int. Appl., 102 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	WO 2004041164	A3	20041007		
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	EP 1558609	A2	20050803	EP 2003-779322	20031024
		R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRAI	US 2002-422313P	P	20021030		
	WO 2003-US34100	W	20031024		
OS	MARPAT	140:423687			
AB	Title compds. I [X = O, S, amino; m,n = 0-3; R1-2, R4 = H, OH, alkoxy, CN, etc.; R3 = H, sulfonyl, acyl, carboxy, etc.; R5 = heterocyclyl] are prepared For instance, tert-Bu 4-[(6-aminopyrimidin-4-yl)oxy]piperidine-1-carboxylate (preparation given) is reacted with 2-chlorothiazole-5-carbonitrile (THF, NaH) and the resulting product deprotected (CH <sub>2</sub> Cl <sub>2</sub> , TFA) to give II. I inhibit, regulate and/or modulate kinase signal transduction; they are useful in the treatment of kinase-dependent diseases and conditions, such as angiogenesis, cancer, tumor growth, atherosclerosis, age related macular degeneration, retinal ischemia, macular edema, diabetic retinopathy and inflammatory diseases.				
IT	<b>436852-23-2P</b> , 2-[(6-Chloro-2-methylpyrimidin-4-yl)amino]-1,3-thiazole-5-carbonitrile <b>691400-75-6P</b> , tert-Butyl 4-[(6-[(5-cyano-1,3-thiazol-2-yl)amino]pyrimidin-4-yl)oxy]piperidine-1-carboxylate <b>691400-79-0P</b> , tert-Butyl 4-[(6-[(5-phenyl-1,3-thiazol-2-yl)amino]pyrimidin-4-yl)oxy]piperidine-1-carboxylate <b>691400-82-5P</b> <b>691400-85-8P</b> , tert-Butyl 4-[[6-[(5-phenyl-1,3-thiazol-2-yl)amino]pyrimidin-4-yl]oxy]methyl]piperidine-1-carboxylate <b>691400-91-6P</b> , 2-[[2-Methyl-6-(piperidin-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate <b>691400-99-4P</b> , 2-[[2-Methyl-6-(piperidin-4-ylmethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate <b>691401-00-0P</b> <b>691401-17-9P</b> , tert-Butyl [4-[[6-[(5-cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-yl]oxy]methyl]piperidin-1-yl]acetate <b>691401-18-0P</b> , [4-[[6-[(5-Cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-				

yl]oxy]methyl]piperidin-1-yl]acetic acid **691401-45-3P**,  
 tert-Butyl 4-[[6-[(5-cyanothiazol-2-yl)amino]-2-methylpyrimidin-4-yl]amino]piperidine-1-carboxylate  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of thiazolylamino-substituted pyrimidines as kinase inhibitors)

RN 436852-23-2 CAPLUS

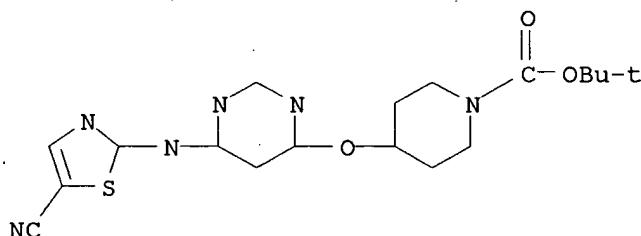
CN 5-Thiazolecarbonitrile, 2-[(6-chloro-2-methyl-4-pyrimidinyl)amino]- (9CI)  
 (CA INDEX NAME)



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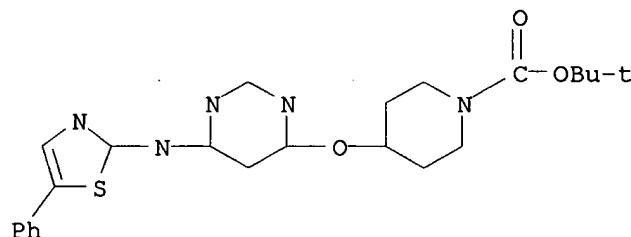
CN 1-Piperidinecarboxylic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-79-0 CAPLUS

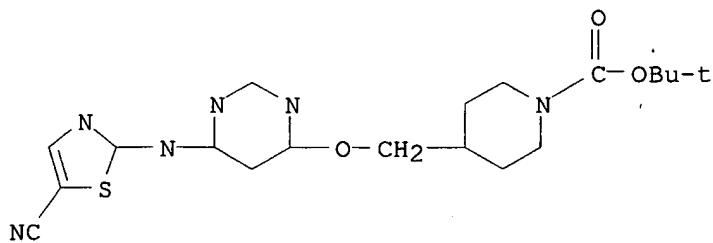
CN 1-Piperidinecarboxylic acid, 4-[[6-[(5-phenyl-2-thiazolyl)amino]-4-pyrimidinyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-82-5 CAPLUS

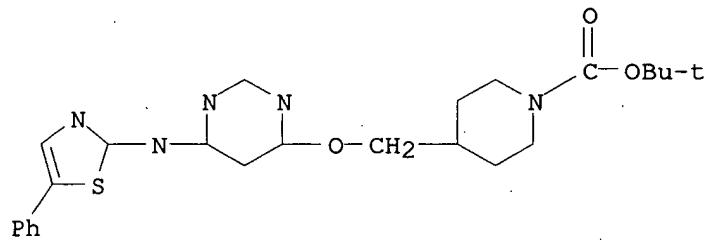
CN 1-Piperidinecarboxylic acid, 4-[[[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-85-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[6-[(5-phenyl-2-thiazolyl)amino]-4-pyrimidinyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

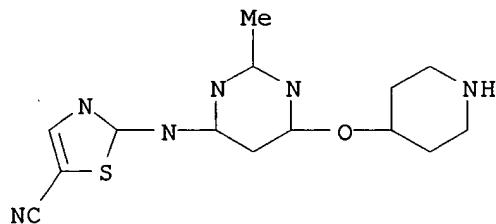
RN 691400-91-6 CAPLUS

CN 5-Thiazolecarbonitrile, 2-((2-methyl-6-(4-piperidinyl)-4-pyrimidinyl)amino)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-90-5

CMF C14 H16 N6 O S

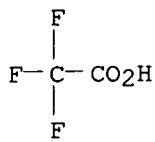


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2



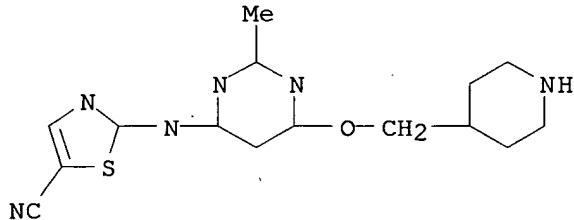
RN 691400-99-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-(4-piperidinylmethoxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-98-3

CMF C15 H18 N6 O S

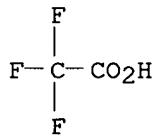


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

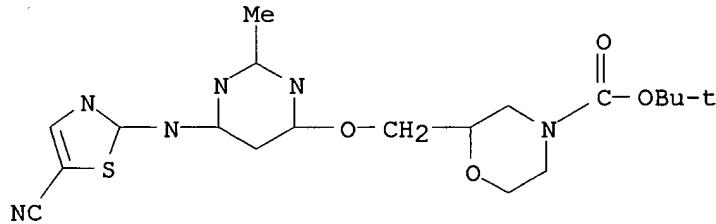
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-00-0 CAPLUS

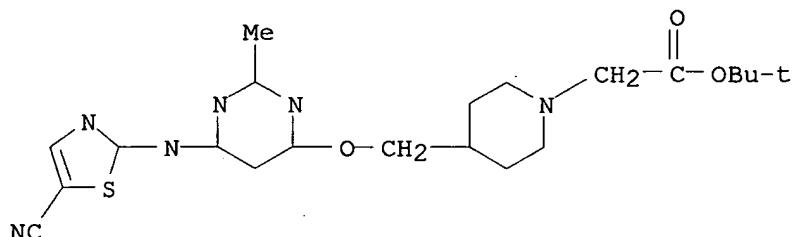
CN 4-Morpholinecarboxylic acid, 2-[[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-17-9 CAPLUS

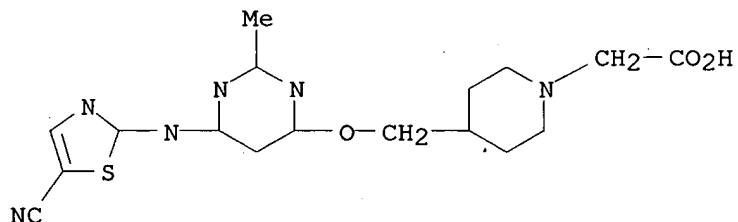
CN 1-Piperidineacetic acid, 4-[[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-18-0 CAPLUS

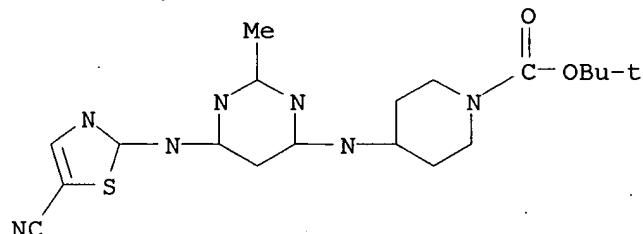
CN 1-Piperidineacetic acid, 4-[[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]methyl]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-45-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT 691400-77-8P, 2-[[6-(Piperidin-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile 691400-78-9P, 2-[[6-(Piperidin-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate 691400-80-3P, N-(5-Phenyl-1,3-thiazol-2-yl)-6-(piperidin-4-yloxy)pyrimidin-4-amine 691400-81-4P, N-(5-Phenyl-1,3-thiazol-2-yl)-6-(piperidin-4-yloxy)pyrimidin-4-amine trifluoroacetate 691400-83-6P, 2-[[6-(Piperidin-4-ylmethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile 691400-84-7P, 2-[[6-(Piperidin-4-ylmethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile

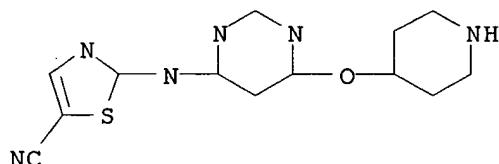
trifluoroacetate **691400-86-9P**, N-(5-Phenyl-1,3-thiazol-2-yl)-6-(piperidin-4-ylmethoxy)pyrimidin-4-amine **691400-87-0P**, N-(5-Phenyl-1,3-thiazol-2-yl)-6-(piperidin-4-ylmethoxy)pyrimidin-4-amine trifluoroacetate **691400-90-5P**, 2-[[2-Methyl-6-(piperidin-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691400-92-7P**, N-(5-Phenyl-1,3-thiazol-2-yl)-6-(piperidin-4-yloxy)-2-methylpyrimidin-4-amine **691400-93-8P** **691400-94-9P**, 2-[[2-Methyl-6-((3R)-pyrrolidin-3-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691400-95-0P**, 2-[[2-Methyl-6-((3R)-pyrrolidin-3-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691400-96-1P**, 2-[[2-Methyl-6-((3S)-pyrrolidin-3-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691400-97-2P**, 2-[[2-Methyl-6-((3S)-pyrrolidin-3-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691400-98-3P**, 2-[[2-Methyl-6-(piperidin-4-ylmethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-01-1P**, 2-[[2-Methyl-6-(morpholin-2-ylmethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-02-2P**, 2-[[2-Methyl-6-(morpholin-2-ylmethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-03-3P**, 2-[[2-Methyl-6-(tetrahydro-2-pyran-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-04-4P**, 2-[[2-Methyl-6-(tetrahydro-2-pyran-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-05-5P**, 2-[[2-Isopropyl-6-(piperidin-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-06-6P**, 2-[[2-Isopropyl-6-(piperidin-4-yloxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-11-3P**, 2-[[2-Methyl-6-[[1-(2-(morpholin-4-yl)ethyl)piperidin-4-yl]oxy]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-15-7P**, 2-[[4-[[6-[(5-Cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-yl]oxy]piperidin-1-yl]-N-isopropylacetamide **691401-16-8P** **691401-19-1P**, N-(tert-Butyl)-2-[[4-[[6-[(5-cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-yl]oxy]methyl]piperidin-1-yl]acetamide **691401-20-4P**, 2-[[2-Methyl-6-(3-(morpholin-4-yl)propoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-21-5P**, 2-[[2-Methyl-6-(3-(morpholin-4-yl)propoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-22-6P**, 2-[[2-Methyl-6-(2-(morpholin-4-yl)ethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-23-7P**, 2-[[2-Methyl-6-(2-(morpholin-4-yl)ethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-24-8P**, 2-[[2-Methyl-6-(2-(piperidin-1-yl)ethoxy)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-25-9P** **691401-26-0P**, 2-[[2-Methyl-6-[(2-(morpholin-4-yl)ethyl)amino]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-27-1P**, 2-[[2-Methyl-6-[(2-(morpholin-4-yl)ethyl)amino]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-29-3P**, 2-[[6-[(3-(Morpholin-4-yl)propyl)amino]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-30-6P**, 2-[[6-[(3-(Morpholin-4-yl)propyl)amino]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-31-7P**, 2-[[2-Methyl-6-(tetrahydro-2H-pyran-4-ylamino)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-32-8P**, 2-[[6-[[3-(1H-Imidazol-1-yl)propyl]amino]-2-methylpyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-33-9P** **691401-34-0P** **691401-35-1P**, 2-[[6-[(1,4-Dioxan-2-ylmethyl)amino]-2-methylpyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-36-2P**, 2-[[6-[(1,4-Dioxan-2-yl)methyl]amino]-2-methylpyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-37-3P** **691401-38-4P**

**691401-40-8P**, 2-[[2-Methyl-6-(tetrahydrofuran-3-ylamino)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-41-9P**,  
 2-[[2-Methyl-6-(tetrahydrofuran-3-ylamino)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-44-2P**,  
 2-[4-[[6-[(5-Cyanothiazol-2-yl)amino]-2-methylpyrimidin-4-yl]amino]piperidin-1-yl]-N-isopropylacetamide trifluoroacetate  
**691401-46-4P**, 2-[[2-Methyl-6-(piperidin-4-ylamino)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-47-5P**,  
 2-[[2-Methyl-6-(piperidin-4-ylamino)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-49-7P**, 2-[[2-Methyl-6-[(piperidin-4-ylmethyl)amino]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-50-0P**, 2-[[2-Methyl-6-[(piperidin-4-ylmethyl)amino]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate **691401-55-5P**, 2-[[2-Methyl-6-[(2-(morpholin-4-yl)ethyl)thio]pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile  
**691401-59-9P**, 2-[[6-(Piperidin-4-ylthio)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile **691401-60-2P**, 2-[[6-(Piperidin-4-ylthio)pyrimidin-4-yl]amino]-1,3-thiazole-5-carbonitrile trifluoroacetate  
**691401-61-3P**, 2-[[6-((5-Cyanothiazol-2-yl)amino)-2-methylpyrimidin-4-yl]amino]piperidin-1-yl]-N-isopropylacetamide  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiazolylamino-substituted pyrimidines as kinase inhibitors)

RN 691400-77-8 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-piperidinyloxy)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

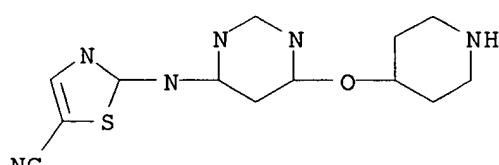
RN 691400-78-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-piperidinyloxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

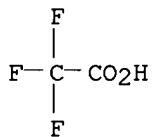
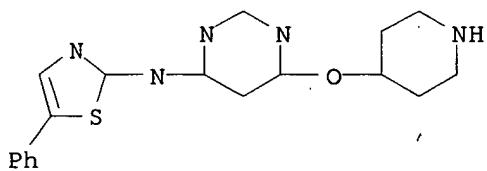
CRN 691400-77-8

CMF C13 H14 N6 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

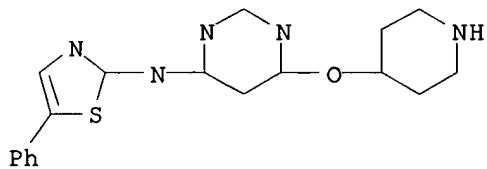
CM 2

CRN 76-05-1  
CMF C2 H F3 O2RN 691400-80-3 CAPLUS  
CN 4-Pyrimidinamine, N-(5-phenyl-2-thiazolyl)-6-(4-piperidinyloxy)- (9CI)  
(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-81-4 CAPLUS  
CN 4-Pyrimidinamine, N-(5-phenyl-2-thiazolyl)-6-(4-piperidinyloxy)-,  
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

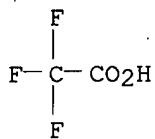
CM 1

CRN 691400-80-3  
CMF C18 H19 N5 O S

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

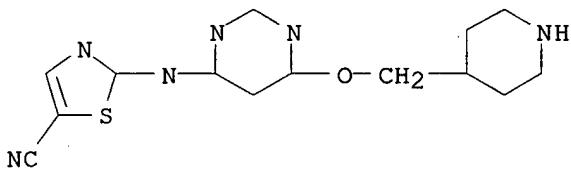
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 691400-83-6 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-piperidinylmethoxy)-4-pyrimidinyl]amino]-(9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

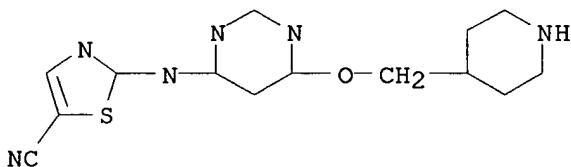
RN 691400-84-7 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-piperidinylmethoxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-83-6

CMF C14 H16 N6 O S

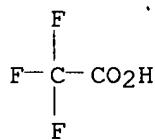


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

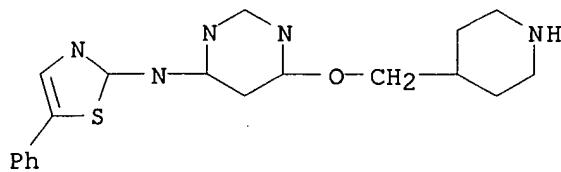
CRN 76-05-1

CMF C2 H F3 O2



RN 691400-86-9 CAPLUS

CN 4-Pyrimidinamine, N-(5-phenyl-2-thiazolyl)-6-(4-piperidinylmethoxy)-(9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

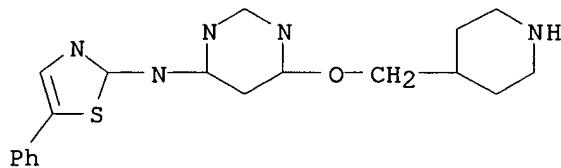
RN 691400-87-0 CAPLUS

CN 4-Pyrimidinamine, N-(5-phenyl-2-thiazolyl)-6-(4-piperidinylmethoxy)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-86-9

CMF C19 H21 N5 O S

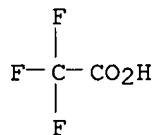


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

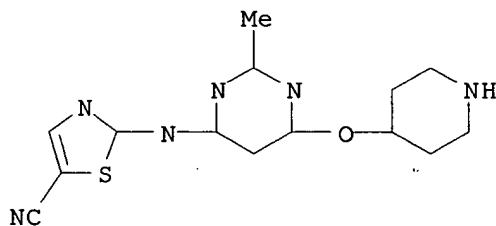
CRN 76-05-1

CMF C2 H F3 O2



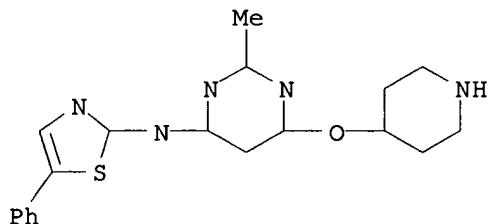
RN 691400-90-5 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-(4-piperidinyl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-92-7 CAPLUS

CN 4-Pyrimidinamine, 2-methyl-N-(5-phenyl-2-thiazolyl)-6-(4-piperidinyloxy)-  
(9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

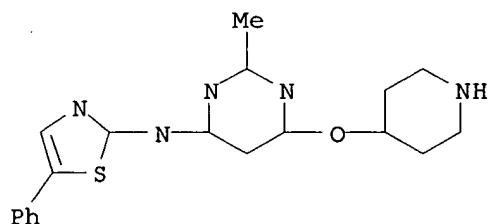
RN 691400-93-8 CAPLUS

CN 4-Pyrimidinamine, 2-methyl-N-(5-phenyl-2-thiazolyl)-6-(4-piperidinyloxy)-,  
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-92-7

CMF C19 H21 N5 O S

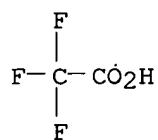


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

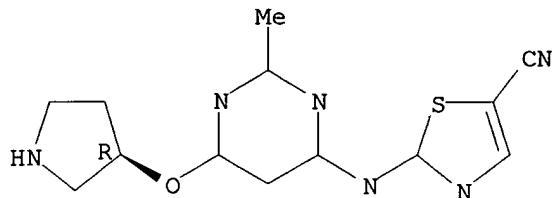
CMF C2 H F3 O2



RN 691400-94-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[(3R)-3-pyrrolidinyloxy]-4-  
pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-95-0 CAPLUS

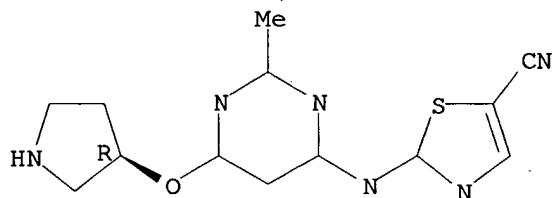
CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(3R)-3-pyrrolidinyl]oxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-94-9

CMF C13 H14 N6 O S

Absolute stereochemistry.

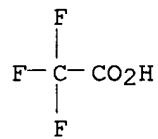


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

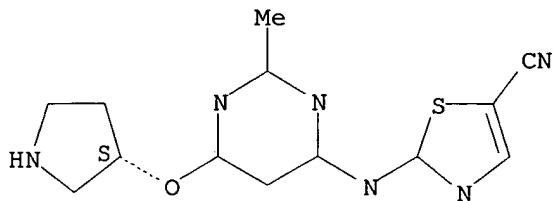
CMF C2 H F3 O2



RN 691400-96-1 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(3S)-3-pyrrolidinyl]oxy)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691400-97-2 CAPLUS

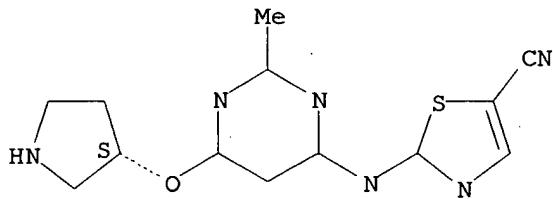
CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(3S)-3-pyrrolidinyl]oxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691400-96-1

CMF C13 H14 N6 O S

Absolute stereochemistry.

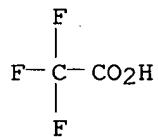


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

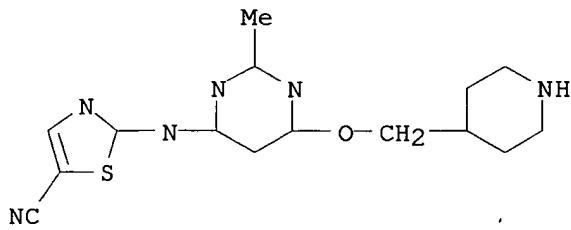
CRN 76-05-1

CMF C2 H F3 O2



RN 691400-98-3 CAPLUS

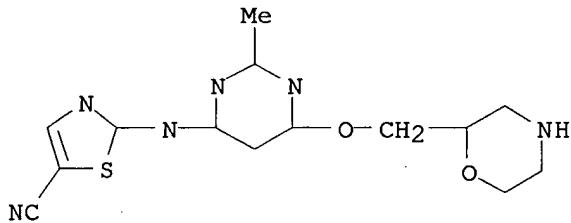
CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-(4-piperidinylmethoxy)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-01-1 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-(2-morpholinylmethoxy)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

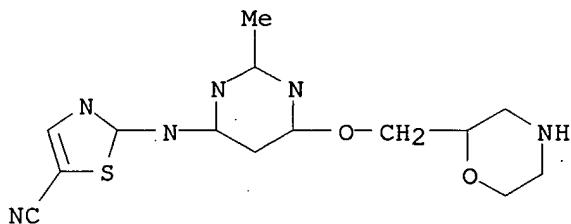
RN 691401-02-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-(2-morpholinylmethoxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-01-1

CMF C14 H16 N6 O2 S

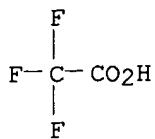


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

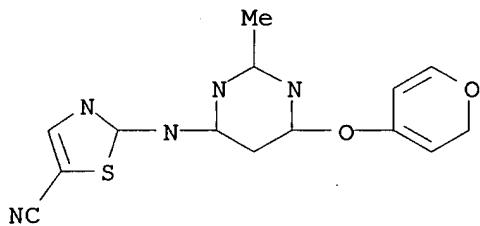
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-03-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-(2H-pyran-4-yloxy)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

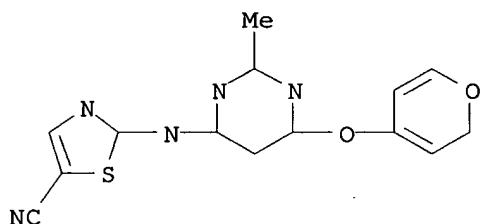
RN 691401-04-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-(2H-pyran-4-yloxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-03-3

CMF C14 H11 N5 O2 S

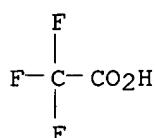


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

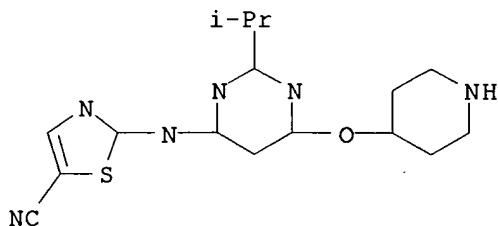
CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 691401-05-5 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[2-(1-methylethyl)-6-(4-piperidinyloxy)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

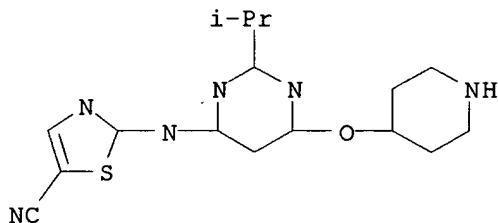


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-06-6 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[2-(1-methylethyl)-6-(4-piperidinyloxy)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

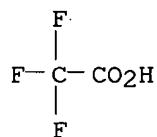
CRN 691401-05-5  
 CMF C16 H20 N6 O S



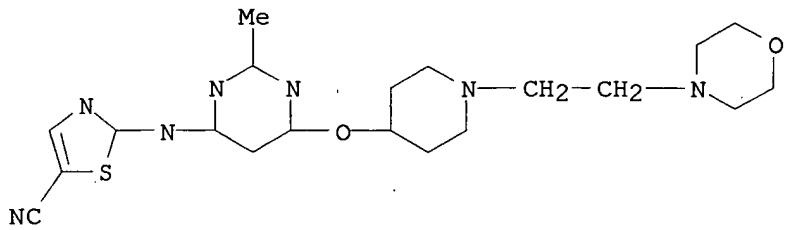
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



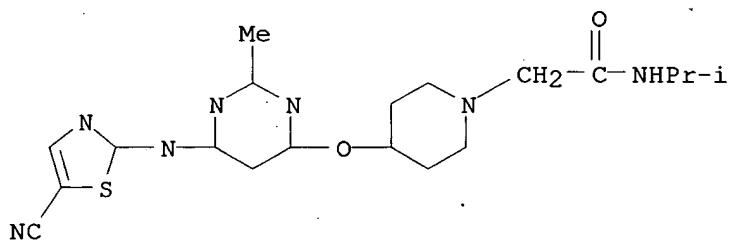
RN 691401-11-3 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[[1-[2-(4-morpholinyl)ethyl]-4-piperidinyl]oxy]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-15-7 CAPLUS

CN 1-Piperidineacetamide, 4-[(6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

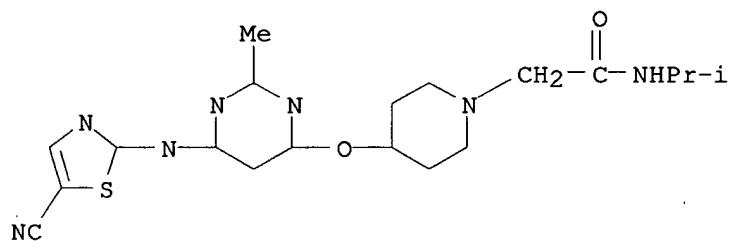
RN 691401-16-8 CAPLUS

CN 1-Piperidineacetamide, 4-[(6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]-N-(1-methylethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-15-7

CMF C19 H25 N7 O2 S

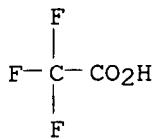


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

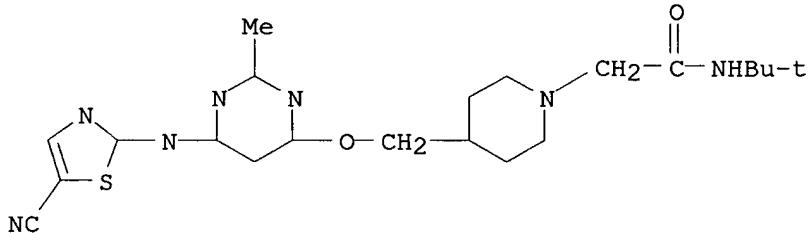
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-19-1 CAPLUS

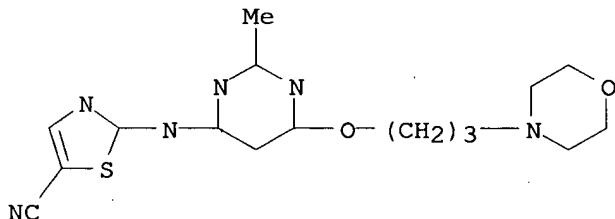
CN 1-Piperidineacetamide, 4-[[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]methyl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-20-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[3-(4-morpholinyl)propoxy]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

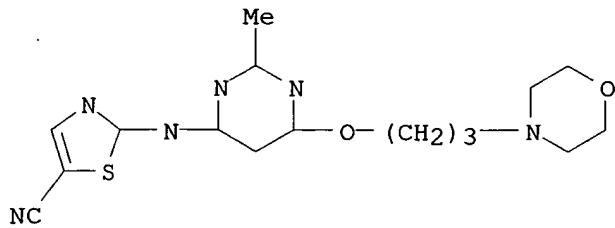
RN 691401-21-5 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[3-(4-morpholinyl)propoxy]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-20-4

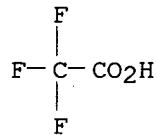
CMF C16 H20 N6 O2 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

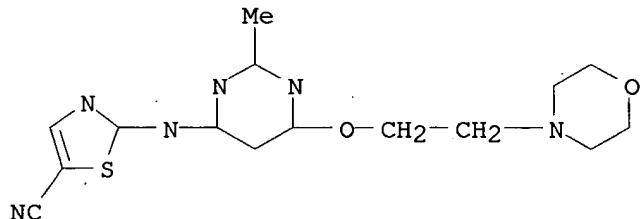
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 691401-22-6 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(2-morpholinyl)ethoxy]-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



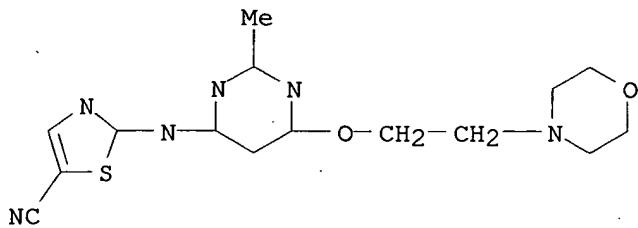
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-23-7 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(2-morpholinyl)ethoxy]-4-pyrimidinyl)amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

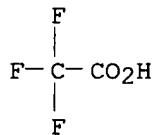
CRN 691401-22-6  
CMF C15 H18 N6 O2 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

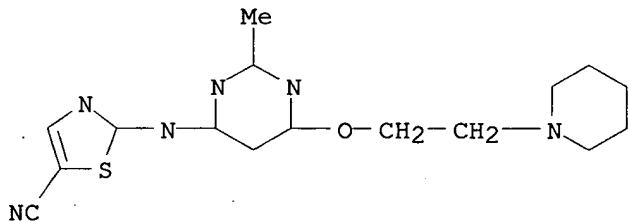
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 691401-24-8 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(2-(1-piperidinyl)ethoxy]-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



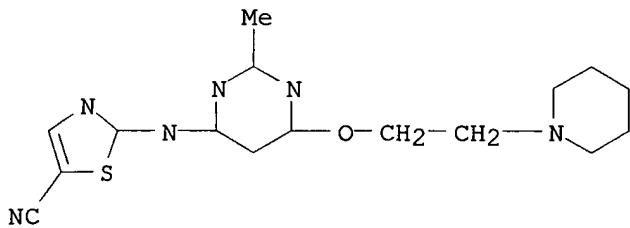
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-25-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(2-(1-piperidinyl)ethoxy]-4-pyrimidinyl)amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

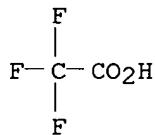
CRN 691401-24-8  
CMF C16 H20 N6 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

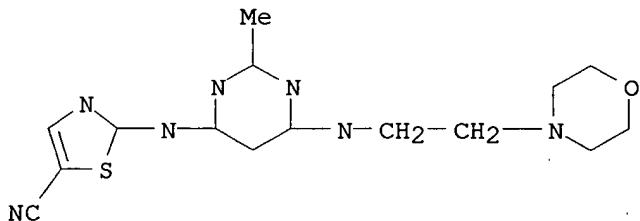
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 691401-26-0 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(2-(4-morpholinyl)ethyl]amino)-4-pyrimidinyl]amino)- (9CI) (CA INDEX NAME)



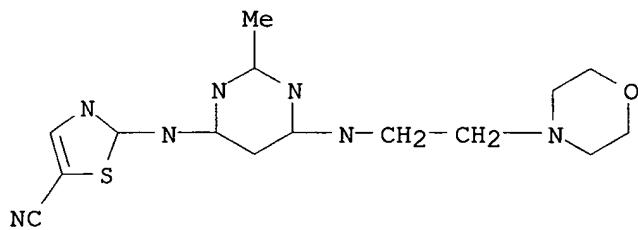
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-27-1 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[[2-(4-morpholinyl)ethyl]amino]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

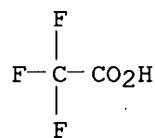
CRN 691401-26-0  
CMF C15 H19 N7 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

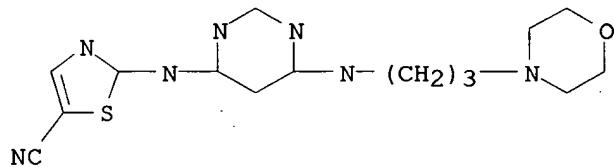
CM 2

CRN 76-05-1  
CMF C2 H F3 O



RN 691401-29-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[[3-(4-morpholinyl)propyl]amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



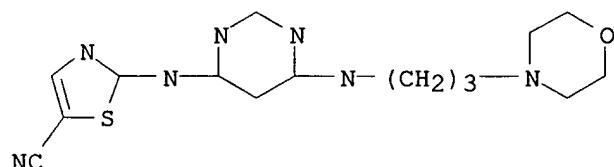
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-30-6 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[[3-(4-morpholinyl)propyl]amino]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

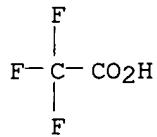
CM 1

CRN 691401-29-3  
CMF C15 H19 N7 O S

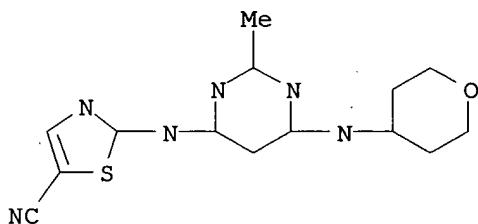


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

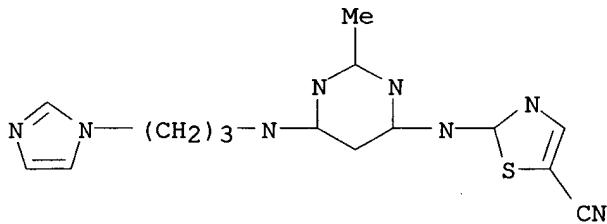
CRN 76-05-1  
CMF C2 H F3 O2

RN 691401-31-7 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[(tetrahydro-2H-pyran-4-yl)amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



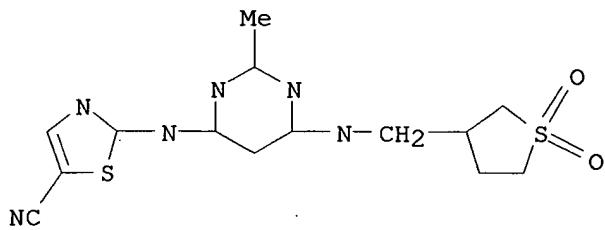
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-32-8 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[6-[[3-(1H-imidazol-1-yl)propyl]amino]-2-methyl-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-33-9 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[[ (tetrahydro-1,1-dioxido-3-thienyl)methyl]amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

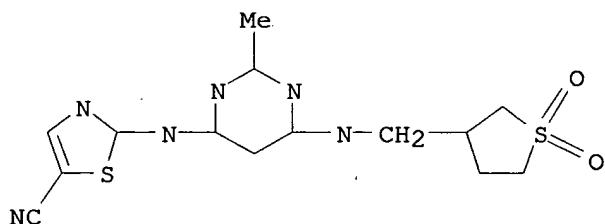
RN 691401-34-0 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[[[tetrahydro-1,1-dioxido-3-thienyl]methyl]amino]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-33-9

CMF C14 H16 N6 O2 S2

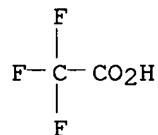


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

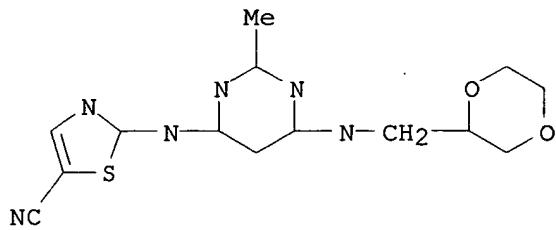
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-35-1 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[(1,4-dioxan-2-ylmethyl)amino]-2-methyl-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

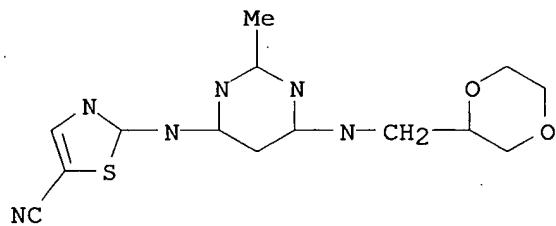
RN 691401-36-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[(1,4-dioxan-2-ylmethyl)amino]-2-methyl-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-35-1

CMF C14 H16 N6 O2 S

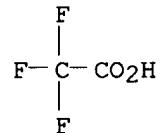


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

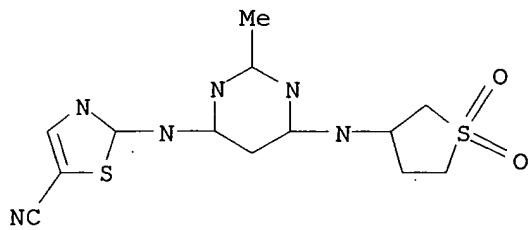
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-37-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[(tetrahydro-1,1-dioxido-3-thienyl)amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

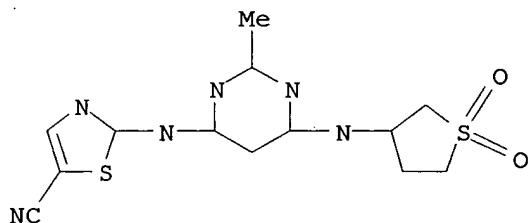
RN 691401-38-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[(tetrahydro-1,1-dioxido-3-thienyl)amino]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-37-3

CMF C13 H14 N6 O2 S2

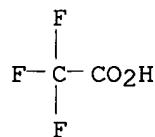


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

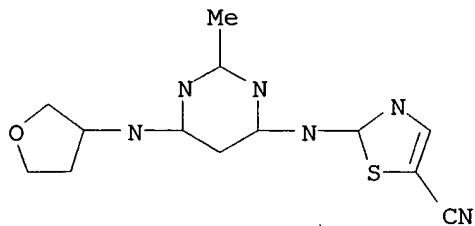
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-40-8 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[(tetrahydro-3-furanyl)amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

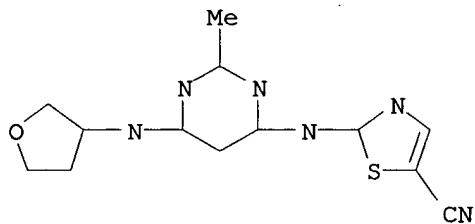
RN 691401-41-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[(tetrahydro-3-furanyl)amino]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-40-8

CMF C13 H14 N6 O S

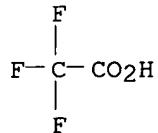


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2



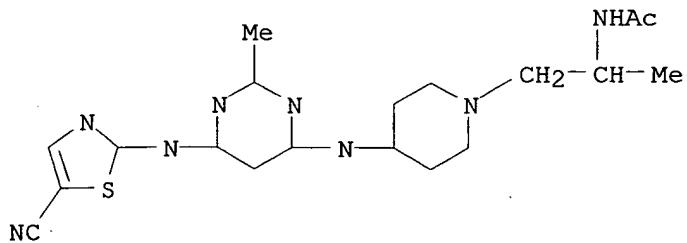
RN 691401-44-2 CAPLUS

CN Acetamide, N-[2-[4-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]amino]-1-piperidinyl-1-methylethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-43-1

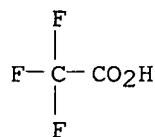
CMF C19 H26 N8 O S



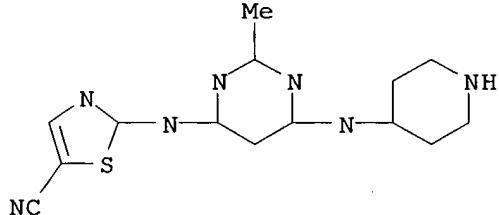
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 691401-46-4 CAPLUS  
CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-(4-piperidinylamino)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

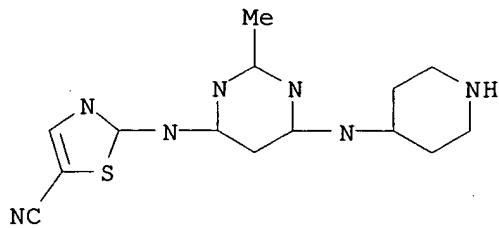


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-47-5 CAPLUS  
CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-(4-piperidinylamino)-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

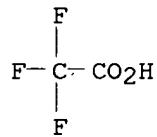
CRN 691401-46-4  
CMF C14 H17 N7 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

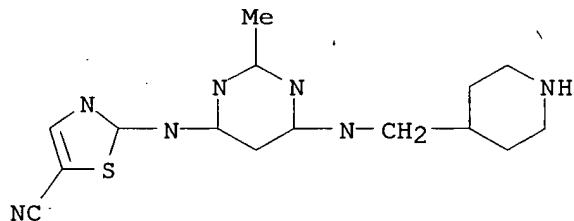
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 691401-49-7 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(4-piperidinylmethyl)amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



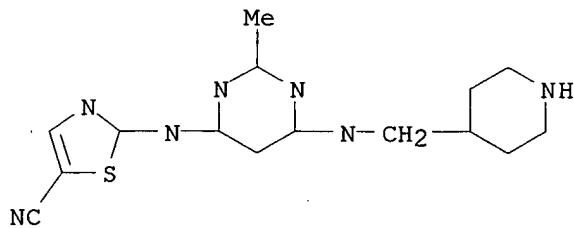
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-50-0 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[(4-piperidinylmethyl)amino]-4-pyrimidinyl]amino]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

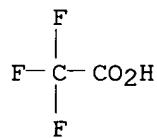
CRN 691401-49-7  
CMF C15 H19 N7 S



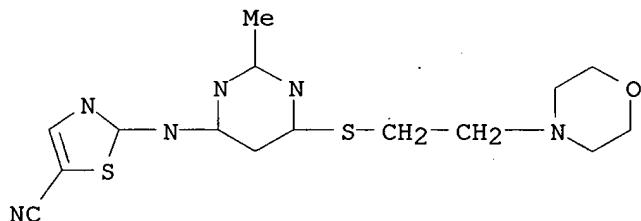
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2



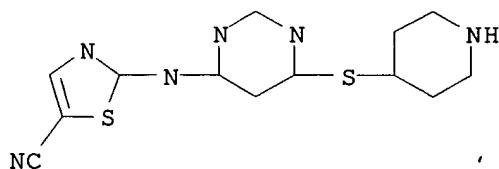
RN 691401-55-5 CAPLUS  
CN 5-Thiazolecarbonitrile, 2-[[2-methyl-6-[[2-(4-morpholinyl)ethyl]thio]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-59-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-piperidinylthio)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



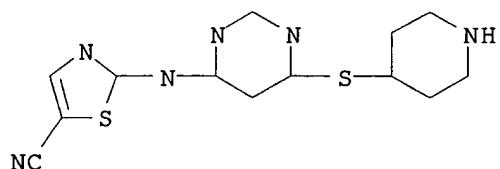
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-60-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-piperidinylthio)-4-pyrimidinyl]amino]-,

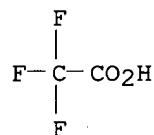
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-59-9  
CMF C13 H14 N6 S2

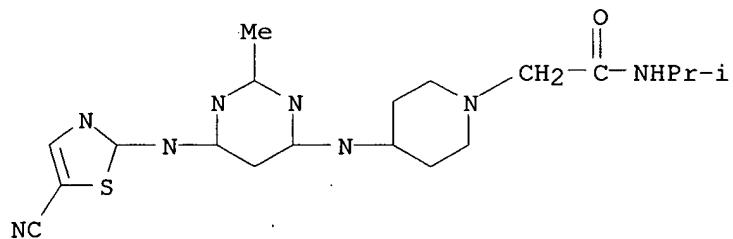
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

RN 691401-61-3 CAPLUS

CN 1-Piperidineacetamide, 4-[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]amino]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT 436851-99-9, 2-[(6-Chloropyrimidin-4-yl)amino]-1,3-thiazole-5-carbonitrile 436852-24-3, 2-[(6-Chloro-5-methylpyrimidin-4-

yl)amino]-1,3-thiazole-5-carbonitrile 691401-39-5,

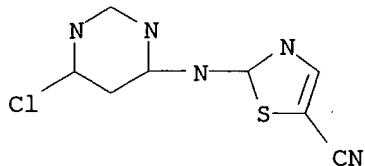
2-[(6-Methoxy-2-methylpyrimidin-4-yl)amino]-1,3-thiazole-5-carbonitrile

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of thiazolylamino-substituted pyrimidines as kinase inhibitors)

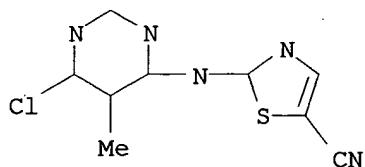
RN 436851-99-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-chloro-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



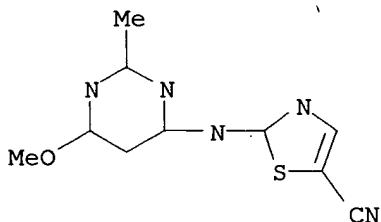
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436852-24-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-chloro-5-methyl-4-pyrimidinyl)amino]- (9CI)  
(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-39-5 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-methoxy-2-methyl-4-pyrimidinyl)amino]- (9CI)  
(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

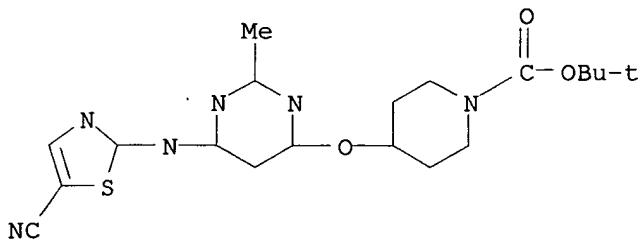
IT 691400-89-2P, tert-Butyl 4-[[6-[(5-cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-yl]oxy]piperidine-1-carboxylate 691401-12-4P,  
tert-Butyl [4-[[6-[(5-cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-yl]oxy]piperidin-1-yl]acetate 691401-14-6P, [4-[[6-[(5-Cyano-1,3-thiazol-2-yl)amino]-2-methylpyrimidin-4-yl]oxy]piperidin-1-yl]acetic acid trifluoroacetate 691401-51-1P 691401-57-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thiazolylamino-substituted pyrimidines as kinase inhibitors)

RN 691400-89-2 CAPLUS

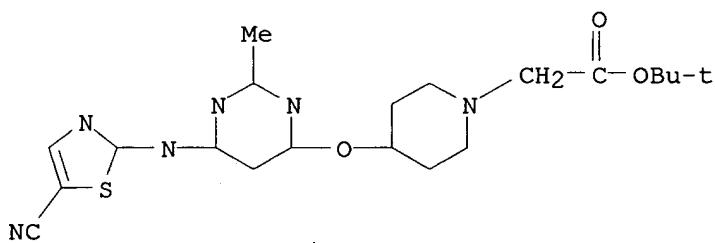
CN 1-Piperidinecarboxylic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 691401-12-4 CAPLUS

CN 1-Piperidineacetic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

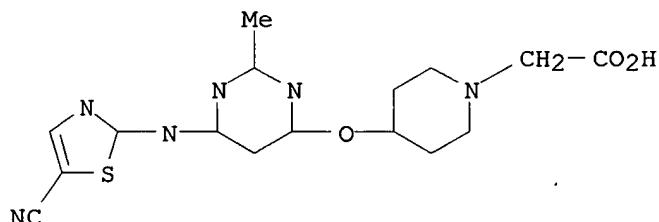
RN 691401-14-6 CAPLUS

CN 1-Piperidineacetic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl]oxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 691401-13-5

CMF C16 H18 N6 O3 S

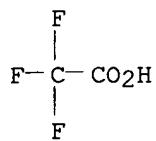


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

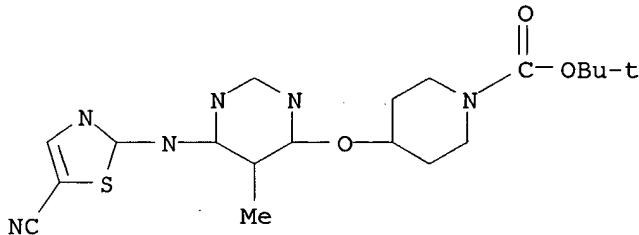
CRN 76-05-1

CMF C2 H F3 O2



RN 691401-51-1 CAPLUS

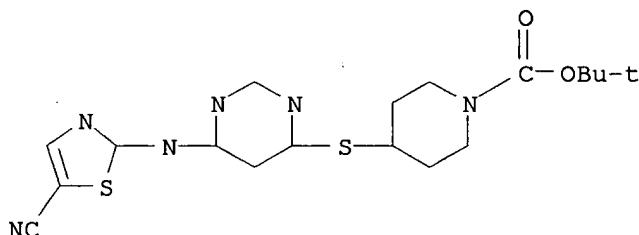
CN 1-Piperidinecarboxylic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-5-methyl-4-pyrimidinyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

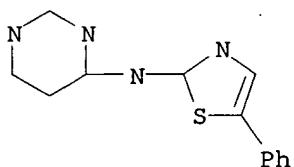
RN 691401-57-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]thio]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:362591 CAPLUS  
 DN 141:106407  
 TI The discovery of N-(1,3-thiazol-2-yl)pyridin-2-amines as potent inhibitors of KDR kinase  
 AU Bilodeau, Mark T.; Rodman, Leonard D.; McGaughey, Georgia B.; Coll, Kathleen E.; Koester, Timothy J.; Hoffman, William F.; Hungate, Randall W.; Kendall, Richard L.; McFall, Rosemary C.; Rickert, Keith W.; Rutledge, Ruth Z.; Thomas, Kenneth A.  
 CS Departments of Medicinal Chemistry, Merck Research Laboratories, West Point, PA, 19486, USA  
 SO Bioorganic & Medicinal Chemistry Letters (2004), 14(11), 2941-2945  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PB Elsevier Science B.V.  
 DT Journal  
 LA English  
 OS CASREACT 141:106407  
 AB An azo-dye lead was modified to a N-(1,3-thiazol-2-yl)pyridin-2-amine series of KDR kinase inhibitors through the use of rapid analog libraries. The two lead compds. were N-butyl-N,3-dimethyl-4-[(5-nitro-2-thiazolyl)azo]benzenamine and N-(5-phenyl-2-thiazolyl)benzamide. This class has been found to be potent, selective, and of low mol. weight. Mol. modeling has postulated an interesting conformational preference and binding mode for these compds. in the active site of the enzyme. A binding mode was proposed for the lead compound N-(5-phenyl-2-thiazolyl)-2-pyridinamine (I) in the KDR kinase active site.  
 IT 436850-69-0P  
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation of N-(thiazolyl)pyridinamines, and analogs and study of their activity as KDR kinase inhibitors and structure-activity relationship)  
 RN 436850-69-0 CAPLUS  
 CN 4-Pyrimidinamine, N-(5-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

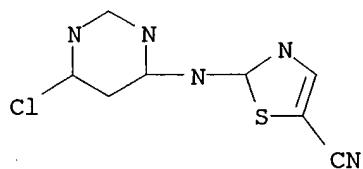
L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:100809 CAPLUS  
 DN 140:146166  
 TI Process for preparation of thiazolylaminopyrimidinylpiperazines from aminothiazoles, dihalopyrimidines, and piperazines.  
 IN Larsen, Robert D.; King, Anthony On-ping  
 PA USA  
 SO U.S. Pat. Appl. Publ., 14 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004023977	A1	20040205	US 2003-618877	20030714
PRAI US 2002-395819P	P	20020715		
OS CASREACT 140:146166; MARPAT 140:146166				

AB Title compds. [I; R = H, alkyl, aminoalkyl, aminocarbonylalkyl; R1 = (substituted) alkyl; R6 = H, halo, cyano, (substituted) Ph, pyridyl], were prepared by reaction of aminothiazoles (II; R6 as above) with dihalopyrimidines (III; X = halo; R1 as above) to give intermediates (IV; variables as above) and coupling of the thiazolylaminopyrimidines with the corresponding piperazines. Thus, 2-amino-5-cyanothiazole (preparation given), 4,6-dichloropyrimidine, and K3PO4 were heated 16 h in DMF at 80° to give 53% 2-[(6-chloropyrimidin-4-yl)amino]-1,3-thiazole-5-carbonitrile. This was heated with N-isopropyl-2-piperazin-1-ylacetamide and Et3N in BuOH at 120° for 3 h to give 65% 2-[4-[(5-cyano-1,3-thiazol-2-yl)amino]pyrimidin-4-yl]piperazin-1-yl]-N-isopropylacetamide.

IT **436851-99-9P**  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of thiazolylaminopyrimidinylpiperazines from aminothiazoles, dihalopyrimidines, and piperazines)

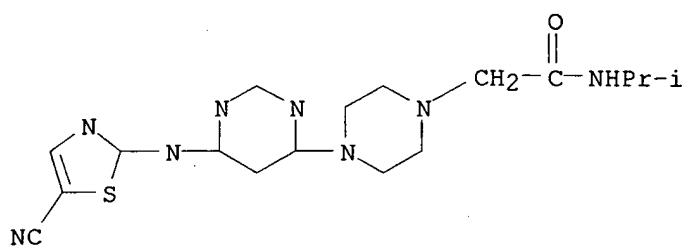
RN 436851-99-9 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[(6-chloro-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT **436850-85-0P**  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of thiazolylaminopyrimidinylpiperazines from aminothiazoles, dihalopyrimidines, and piperazines)

RN 436850-85-0 CAPLUS  
 CN 1-Piperazineacetamide, 4-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:757702 CAPLUS  
 DN 139:255407  
 TI Azolylaminoazine compounds as inhibitors of protein kinases, and their therapeutic use  
 IN Binch, Hayley; Charrier, Jean-Damien; Everitt, Simon; Golec, Julian M. C.;  
 Kay, David; Knegtel, Ronald; Miller, Andrew; Pierard, Francoise;  
 Bebbington, David  
 PA Vertex Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 61 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003078426	A1	20030925	WO 2003-US7904	20030314
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, LS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, EU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, GM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	US 2004002496	A1	20040101	US 2003-389709	20030314
	EP 1485381	A1	20041215	EP 2003-744682	20030314
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	US 2002-364840P	P	20020315		
	WO 2003-US7904	A	20030314		

OS MARPAT 139:255407

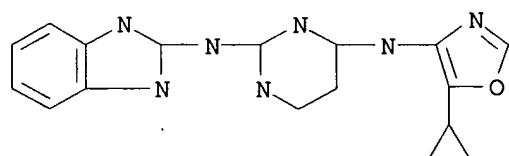
AB The invention provides azolylaminoazine compds. useful as inhibitors of protein kinases. The invention also provides pharmaceutically acceptable compns. comprising the compds. and methods of using the compns. in the treatment of various diseases, conditions, and disorders.

IT 603932-39-4 603932-51-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (azolylaminoazine compds. as inhibitors of protein kinases, therapeutic use, and use with other agents)

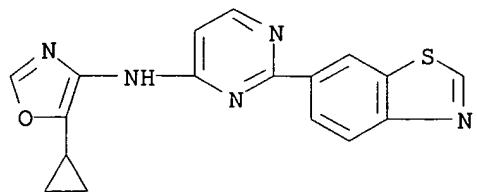
RN 603932-39-4 CAPLUS

CN 2,4-Pyrimidinediamine, N2-1H-benzimidazol-2-yl-N4-(5-cyclopropyl-4-oxazolyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 603932-51-0 CAPLUS

CN 4-Pyrimidinamine, 2-(6-benzothiazolyl)-N-(5-cyclopropyl-4-oxazolyl)- (9CI)  
(CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2002:449449 CAPLUS  
 DN 137:33318  
 TI Preparation of pyrimidinylaminothiazoles as tyrosine kinase inhibitors.  
 IN Bilodeau, Mark T.; Hartman, George D.; Hoffman, Jacob M., Jr.; Lumma, William C., Jr.; Manley, Peter J.; Rodman, Leonard; Sisko, John T.; Smith, Anthony M.; Tucker, Thomas J.  
 PA Merck & Co., Inc., USA  
 SO PCT Int. Appl., 169 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

*Appl PCT*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002045652	A2	20020613	WO 2001-US44573	20011130
	WO 2002045652	A3	20020822		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002137755	A1	20020926	US 2001-990473 <i>ABN</i>	20011121
	CA 2429728	AA	20020613	CA 2001-2429728	20011130
	AU 2002032441	A5	20020618	AU 2002-32441	20011130
	EP 1341540	A2	20030910	EP 2001-991965	20011130
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004524282	T2	20040812	JP 2002-547438	20011130
	US 2004063720	A1	20040401	US 2003-677687	20031002
PRAI	US 2000-251006P	P	20001204		
	US 2001-990473	A1	20011121		
	WO 2001-US44573	W	20011130		
OS	MARPAT 137:33318				
AB	Title compds. [I; A, B = N, NO; Y = O, S, NR4; R1, R2 = H, perfluoroalkoxy, OH, cyano, halo, (substituted) alkyl(oxy)(carbonyl), aryl(oxy)(carbonyl), heterocyclyl, etc.; R4 = H, aryl, alkyl; R5 = H, SO2Rc, CORc, Rc, CO2Rc; R6 = aryl, cyano, halo, (substituted) alkyl, alkenyl, alkynyl, heterocyclyl, aminocarbonyl; Rc = alkyl, aryl, heterocyclyl], were prepared for treating angiogenesis, cancer, tumor growth, atherosclerosis, age related macular degeneration, diabetic retinopathy, inflammation, etc. Thus, 4-aminopyrimidine was stirred with NaH in THF; 2-bromo-5-phenylthiazole was added and the mixture was refluxed overnight to give 5-phenylthiazol-2-yl pyrimidin-4-yl amine. I inhibited vascular endothelial growth factor-stimulated mitogenesis of human vascular endothelial cells with IC50 = 0.01-5.0 nM.				
IT	436850-69-0P, N-(5-Phenyl-thiazol-2-yl)-N-(pyrimidin-4-yl)amine 436850-71-4P 436850-73-6P 436850-74-7P, 2-[(2-Aminopyrimidin-4-yl)amino]-1,3-thiazole-5-carbonitrile 436850-75-8P, 2-[(6-Aminopyrimidin-4-yl)amino]-1,3-thiazole-5-carbonitrile 436850-76-9P 436850-77-0P 436850-78-1P 436850-79-2P 436850-80-5P 436850-81-6P 436850-82-7P 436850-83-8P 436850-84-9P 436850-85-0P 436850-87-2P				

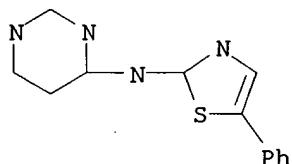
436850-89-4P 436850-91-8P 436850-92-9P  
 436850-94-1P 436850-96-3P 436850-98-5P  
 436851-00-2P 436851-01-3P 436851-02-4P  
 436851-03-5P 436851-04-6P 436851-05-7P  
 436851-06-8P 436851-07-9P 436851-08-0P  
 436851-09-1P 436851-10-4P 436851-12-6P  
 436851-14-8P 436851-15-9P 436851-17-1P  
 436851-19-3P 436851-21-7P 436851-23-9P  
 436851-24-0P 436851-26-2P 436851-28-4P  
 436851-30-8P 436851-32-0P 436851-34-2P  
 436851-36-4P 436851-38-6P 436851-40-0P  
 436851-41-1P 436851-42-2P 436851-43-3P  
 436851-44-4P 436851-45-5P 436851-46-6P  
 436851-47-7P 436851-48-8P 436851-49-9P  
 436851-50-2P 436851-51-3P 436851-52-4P  
 436851-53-5P 436851-54-6P 436851-55-7P  
 436851-56-8P 436851-57-9P 436851-58-0P  
 436851-59-1P 436851-60-4P 436851-61-5P  
 436851-62-6P 436851-63-7P 436851-64-8P  
 436851-65-9P 436851-66-0P 436851-67-1P  
 436851-68-2P 436851-69-3P 436851-70-6P  
**436852-19-6P, 2-(Pyrimidin-4-ylamino)thiazole-5-carbonitrile**  
**436852-24-3P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrimidinylaminothiazoles as tyrosine kinase inhibitors)

RN 436850-69-0 CAPLUS

CN 4-Pyrimidinamine, N-(5-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

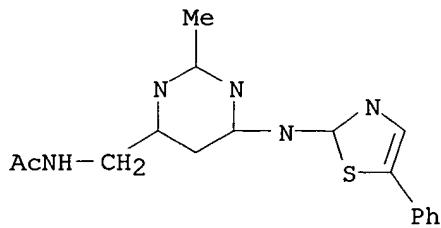
RN 436850-71-4 CAPLUS

CN Acetamide, N-[(2-methyl-6-[(5-phenyl-2-thiazolyl)amino]-4-pyrimidinyl)methyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436850-70-3

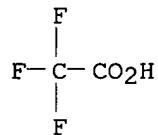
CMF C17 H17 N5 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

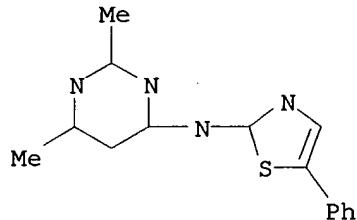


RN 436850-73-6 CAPLUS

CN 4-Pyrimidinamine, 2,6-dimethyl-N-(5-phenyl-2-thiazolyl)-, trifluoroacetate  
(9CI) (CA INDEX NAME)

CM 1

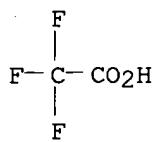
CRN 436850-72-5  
CMF C15 H14 N4 S



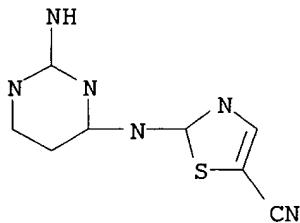
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

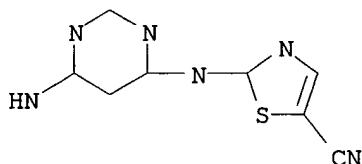


RN 436850-74-7 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[(2-amino-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



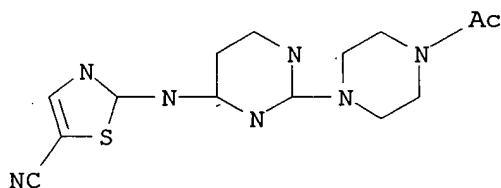
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436850-75-8 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[(6-amino-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



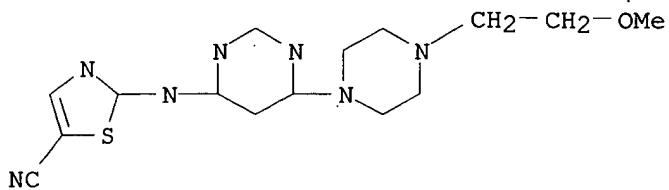
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436850-76-9 CAPLUS  
 CN Piperazine, 1-acetyl-4-[(5-cyano-2-thiazolyl)amino]-2-pyrimidinyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

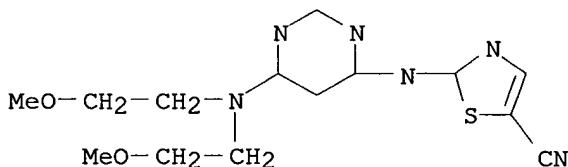
RN 436850-77-0 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[6-[4-(2-methoxyethyl)-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436850-78-1 CAPLUS

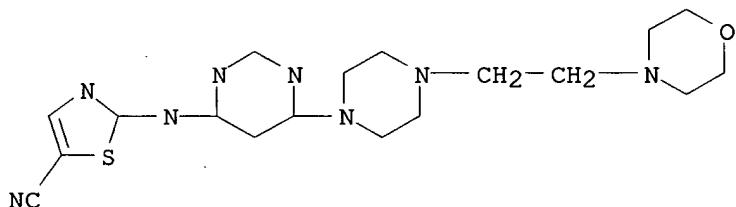
CN 5-Thiazolecarbonitrile, 2-[(6-[(2-methoxyethyl)amino]-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436850-79-2 CAPLUS

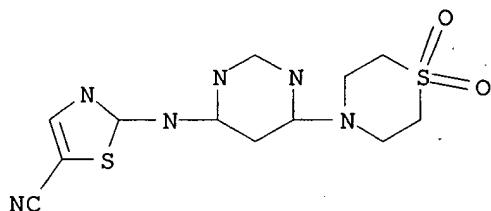
CN 5-Thiazolecarbonitrile, 2-[(6-[(2-[(4-morpholinyl)ethyl]amino)-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436850-80-5 CAPLUS

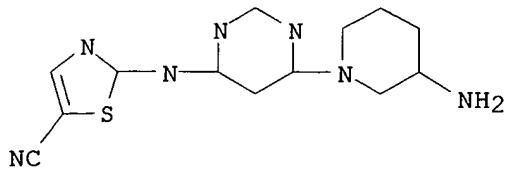
CN 5-Thiazolecarbonitrile, 2-[(6-[(1,1-dioxido-4-thiomorpholinyl)-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



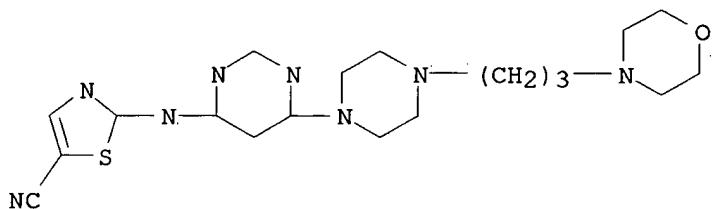
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436850-81-6 CAPLUS

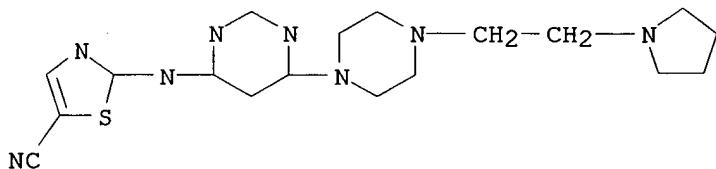
CN 5-Thiazolecarbonitrile, 2-[(6-[(3-amino-1-piperidinyl)-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



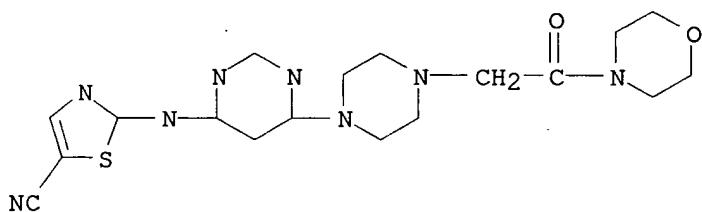
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 436850-82-7 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[6-[4-[3-(4-morpholinyl)propyl]-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



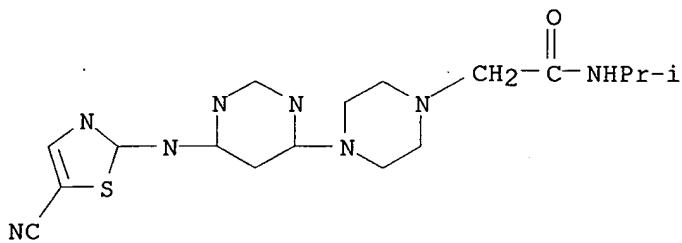
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 436850-83-8 CAPLUS  
 CN 5-Thiazolecarbonitrile, 2-[[6-[4-[2-(1-pyrrolidinyl)ethyl]-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 436850-84-9 CAPLUS  
 CN Morpholine, 4-[[4-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-1-piperazinyl]acetyl]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 436850-85-0 CAPLUS  
 CN 1-Piperazineacetamide, 4-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

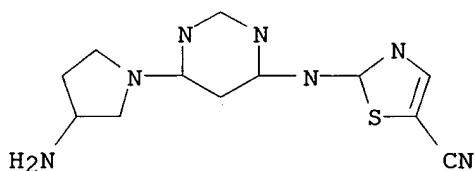
RN 436850-87-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-(3-amino-1-pyrrolidinyl)-4-pyrimidinyl)amino]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436850-86-1

CMF C12 H13 N7 S

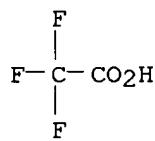


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2



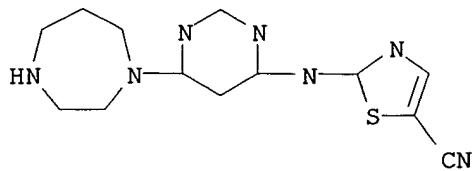
RN 436850-89-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-(hexahydro-1H-1,4-diazepin-1-yl)-4-pyrimidinyl)amino]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436850-88-3

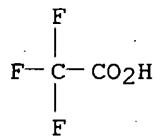
CMF C13 H15 N7 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

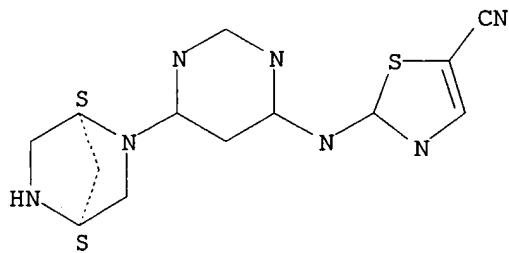


RN 436850-91-8 CAPLUS  
CN 5-Thiazolecarbonitrile, 2-[[6-(1S,4S)-2,5-diazabicyclo[2.2.1]hept-2-yl-4-pyrimidinyl]amino]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436850-90-7  
CMF C13 H13 N7 S

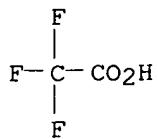
Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

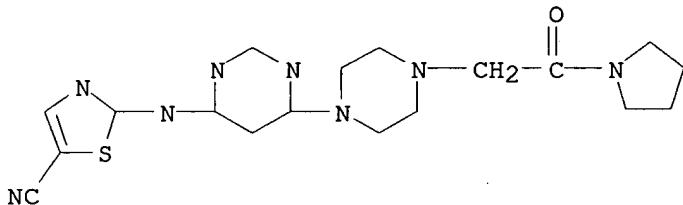
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 436850-92-9 CAPLUS

CN Pyrrolidine, 1-[[4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-1-piperazinyl]acetyl] (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

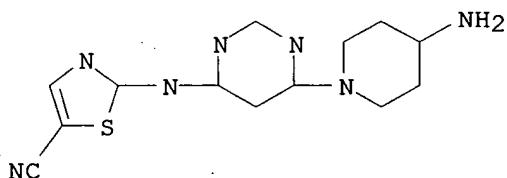
RN 436850-94-1 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-(4-amino-1-piperidinyl)-4-pyrimidinyl)amino]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436850-93-0

CMF C13 H15 N7 S

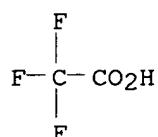


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2

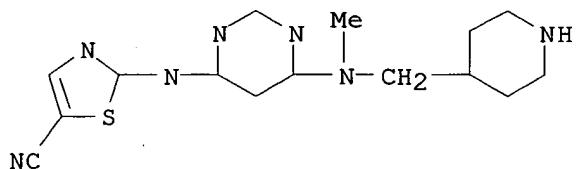


RN 436850-96-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[methyl(4-piperidinylmethyl)amino]-4-

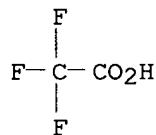
pyrimidinyl]amino]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436850-95-2  
CMF C15 H19 N7 S

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

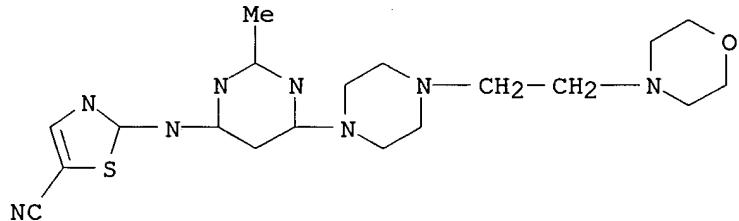
CM 2

CRN 76-05-1  
CMF C2 H F3 O2

RN 436850-98-5 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methyl-6-[4-[2-(4-morpholinyl)ethyl]-1-piperazinyl]-4-pyrimidinyl]amino]-, tris(trifluoroacetate) (9CI) (CA INDEX NAME)

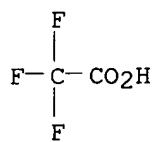
CM 1

CRN 436850-97-4  
CMF C19 H26 N8 O S

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2



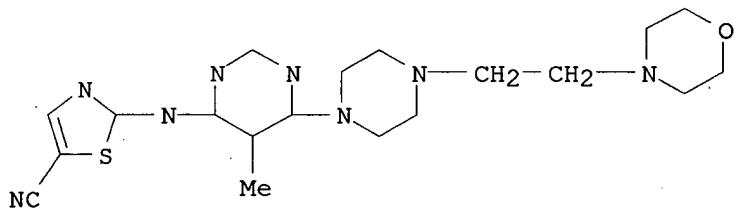
RN 436851-00-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[5-methyl-6-[4-[2-(4-morpholinyl)ethyl]-1-piperazinyl]-4-pyrimidinyl]amino]-, tris(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436850-99-6

CMF C19 H26 N8 O S

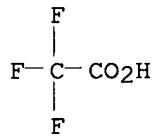


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

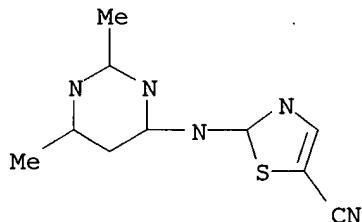
CRN 76-05-1

CMF C2 H F3 O2



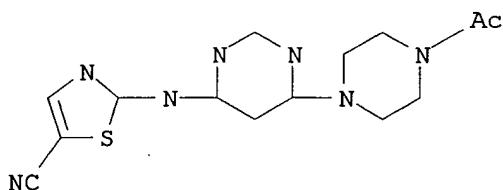
RN 436851-01-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2,6-dimethyl-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

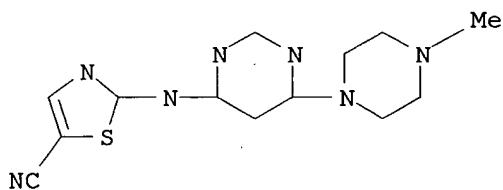
RN 436851-02-4 CAPLUS

CN Piperazine, 1-acetyl-4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-  
(9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

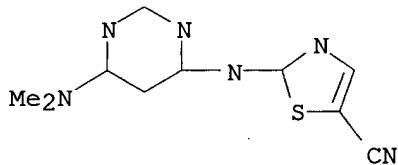
RN 436851-03-5 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-methyl-1-piperazinyl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



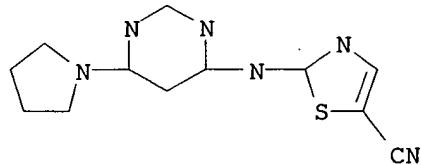
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-04-6 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(dimethylamino)-4-pyrimidinyl]amino]- (9CI)  
(CA INDEX NAME)

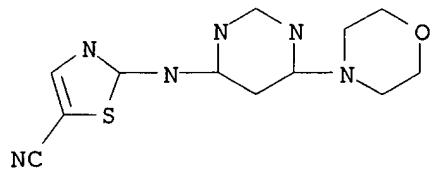
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-05-7 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(1-pyrrolidinyl)-4-pyrimidinyl]amino]- (9CI)  
(CA INDEX NAME)

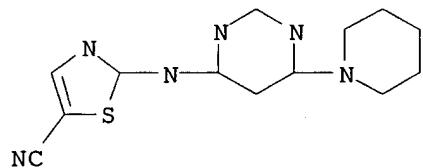
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-06-8 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-morpholinyl)-4-pyrimidinyl]amino]- (9CI)  
(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

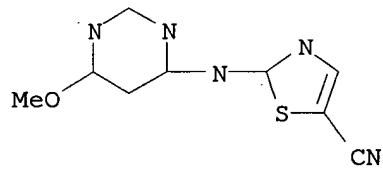
RN 436851-07-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(1-piperidinyl)-4-pyrimidinyl]amino]- (9CI)  
(CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-08-0 CAPLUS

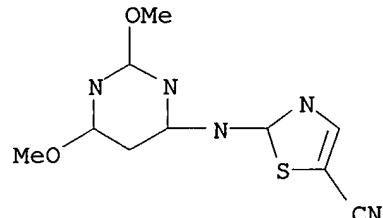
CN 5-Thiazolecarbonitrile, 2-[(6-methoxy-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-09-1 CAPLUS

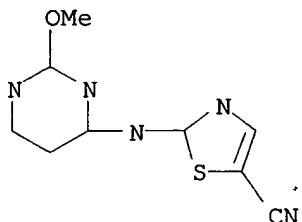
CN 5-Thiazolecarbonitrile, 2-[(2,6-dimethoxy-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-10-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(2-methoxy-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

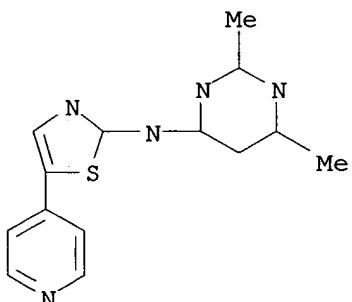
RN 436851-12-6 CAPLUS

CN 4-Pyrimidinamine, 2,6-dimethyl-N-[5-(4-pyridinyl)-2-thiazolyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436851-11-5

CMF C14 H13 N5 S

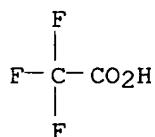


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 436851-14-8 CAPLUS

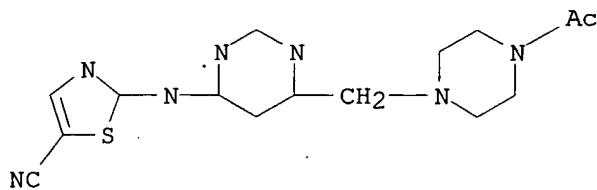
CN Piperazine, 1-acetyl-4-[[6-[(5-cyano-2-thiazolyl)amino]-4-

pyrimidinyl)methyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436851-13-7

CMF C15 H17 N7 O S

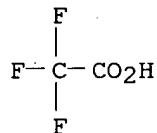


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

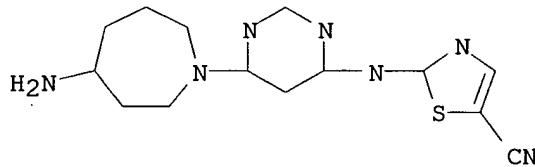
CRN 76-05-1

CMF C2 H F3 O2



RN 436851-15-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(4-aminohexahydro-1H-azepin-1-yl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

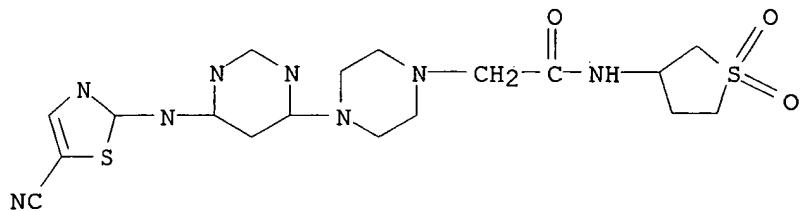
RN 436851-17-1 CAPLUS

CN 1-Piperazineacetamide, 4-[(6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl)-N-(tetrahydro-1,1-dioxido-3-thienyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-16-0

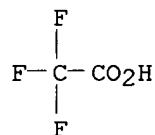
CMF C18 H22 N8 O3 S2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

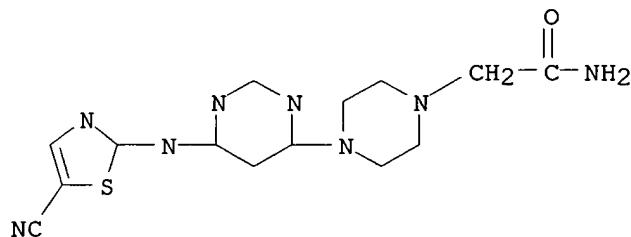


RN 436851-19-3 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-, bis(trifluoroacéte) (9CI) (CA INDEX NAME)

CM 1

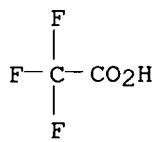
CRN 436851-18-2  
CMF C14 H16 N8 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2



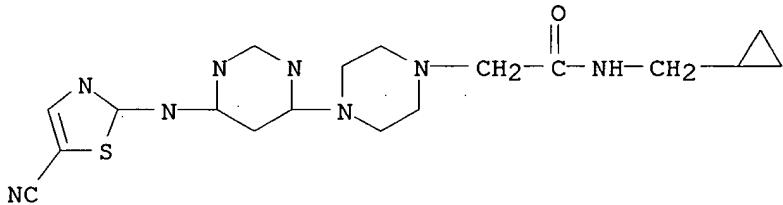
RN 436851-21-7 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(cyclopropylmethyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-20-6

CMF C18 H22 N8 O S

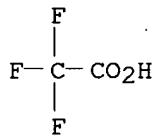


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

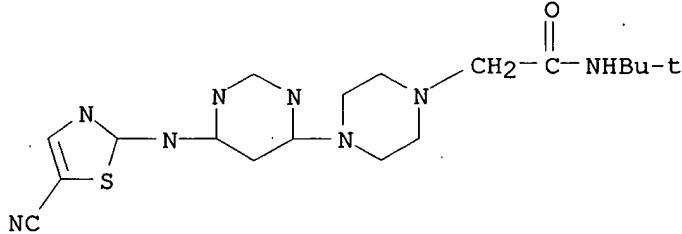
CRN 76-05-1

CMF C2 H F3 O2



RN 436851-23-9 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

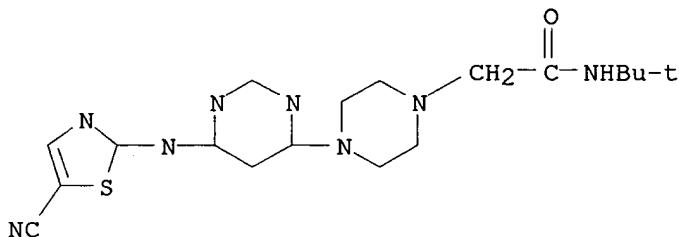
RN 436851-24-0 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1,1-dimethylethyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-23-9

CMF C18 H24 N8 O S

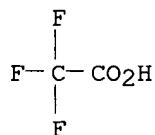


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2



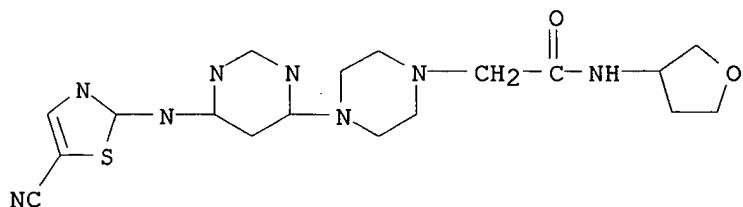
RN 436851-26-2 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(tetrahydro-3-furanyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-25-1

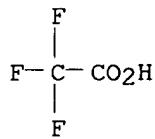
CMF C18 H22 N8 O2 S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

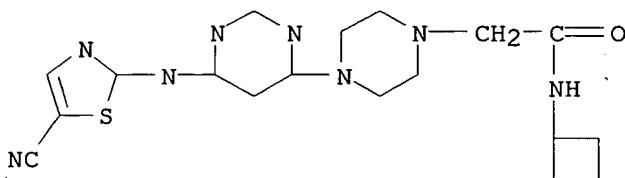
CRN 76-05-1  
 CMF C2 H F3 O2



RN 436851-28-4 CAPLUS  
 CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-cyclobutyl-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

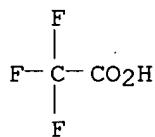
CRN 436851-27-3  
 CMF C18 H22 N8 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

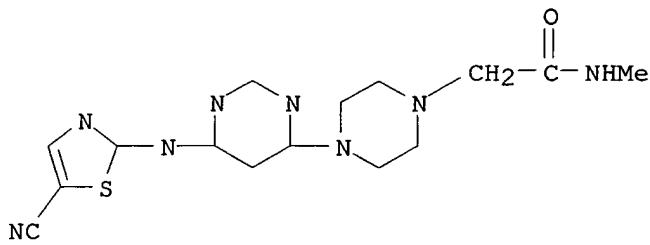
CRN 76-05-1  
 CMF C2 H F3 O2



RN 436851-30-8 CAPLUS  
 CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-methyl-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

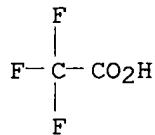
CRN 436851-29-5  
 CMF C15 H18 N8 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

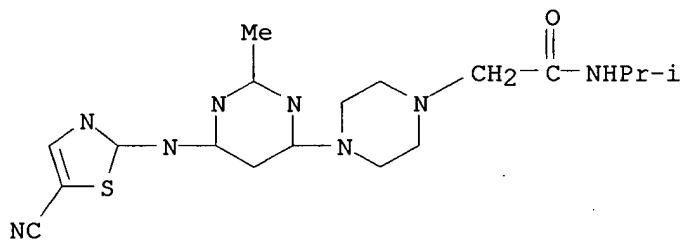


RN 436851-32-0 CAPLUS

CN 1-Piperazineacetamide, 4-[(5-cyano-2-thiazolyl)amino]-2-methyl-4-pyrimidinyl-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

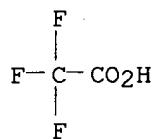
CRN 436851-31-9  
CMF C18 H24 N8 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2



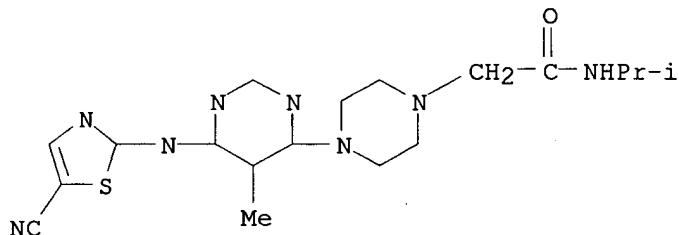
RN 436851-34-2 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-5-methyl-4-pyrimidinyl]-N-(1-methylethyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-33-1

CMF C18 H24 N8 O S

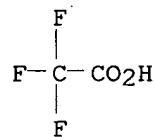


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1

CMF C2 H F3 O2



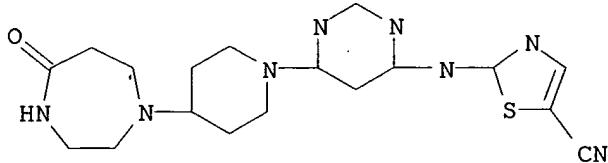
RN 436851-36-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[(4-hexahydro-5-oxo-1H-1,4-diazepin-1-yl)-1-piperidinyl]-4-pyrimidinyl]amino]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-35-3

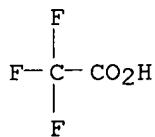
CMF C18 H22 N8 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

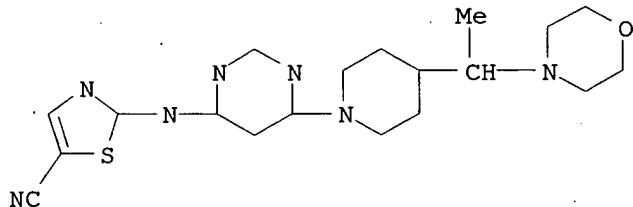


RN 436851-38-6 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[4-[1-(4-morpholinyl)ethyl]-1-piperidinyl]-4-pyrimidinyl]amino]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

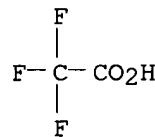
CRN 436851-37-5  
CMF C19 H25 N7 O S



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 76-05-1  
CMF C2 H F3 O2



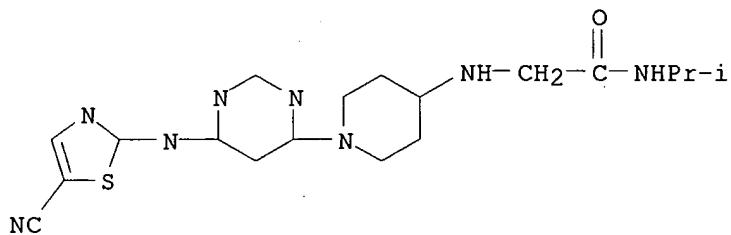
RN 436851-40-0 CAPLUS

CN Acetamide, 2-[[1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-4-piperidinyl]amino]-N-(1-methylethyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436851-39-7

CMF C18 H24 N8 O S

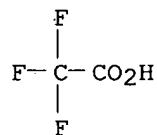


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

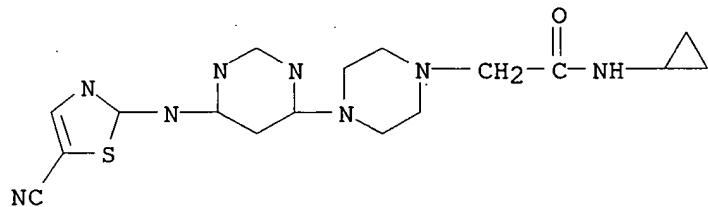
CRN 76-05-1

CMF C2 H F3 O2



RN 436851-41-1 CAPLUS

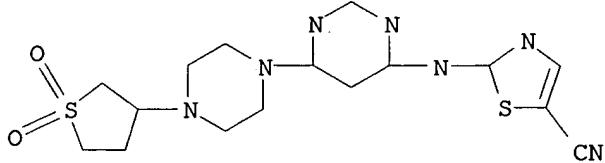
CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-cyclopropyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-42-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[4-(tetrahydro-1,1-dioxido-3-thienyl)-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

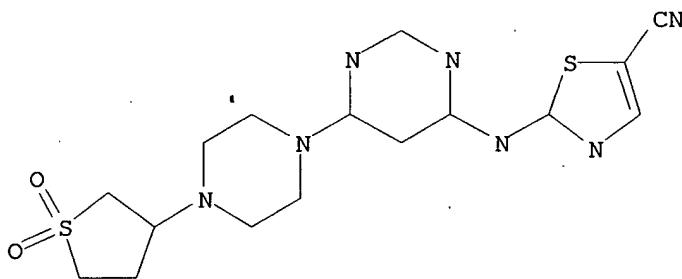


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-43-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-[(4-(tetrahydro-1,1-dioxido-3-thienyl)-1-piperazinyl)-4-pyrimidinyl]amino)-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

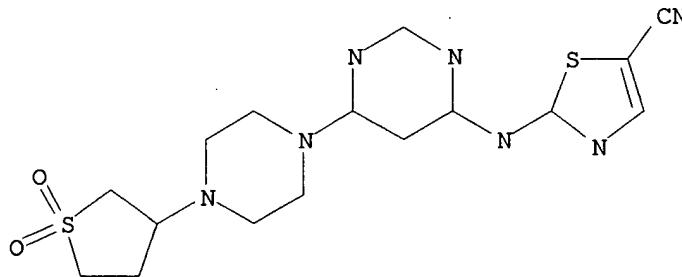


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-44-4 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-[(4-(tetrahydro-1,1-dioxido-3-thienyl)-1-piperazinyl)-4-pyrimidinyl]amino)-, (+)- (9CI) (CA INDEX NAME)

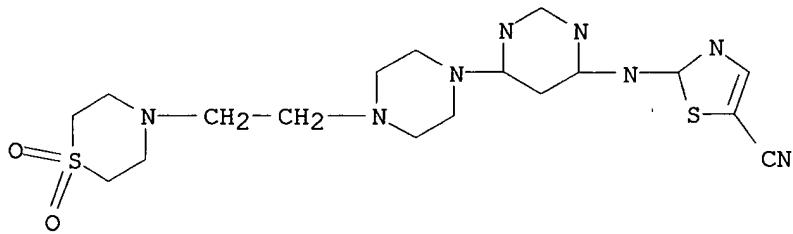
Rotation (+).



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-45-5 CAPLUS

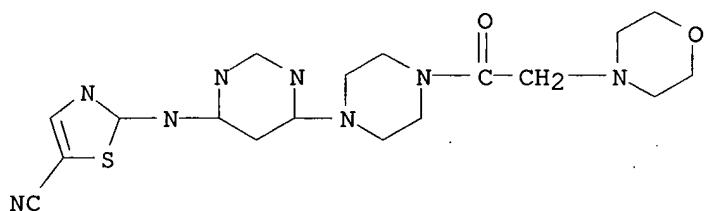
CN 5-Thiazolecarbonitrile, 2-[(6-[(4-[2-(1,1-dioxido-4-thiomorpholinyl)ethyl]-1-piperazinyl)-4-pyrimidinyl]amino)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-46-6 CAPLUS

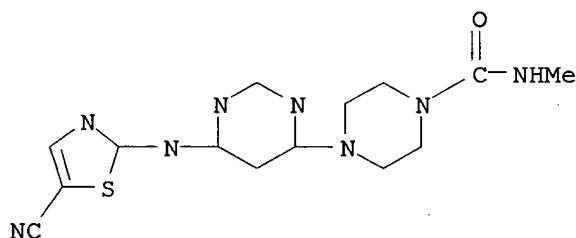
CN Piperazine, 1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-4-(4-morpholinylacetyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-47-7 CAPLUS

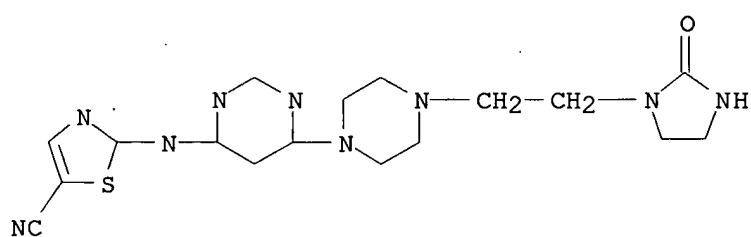
CN 1-Piperazinecarboxamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-48-8 CAPLUS

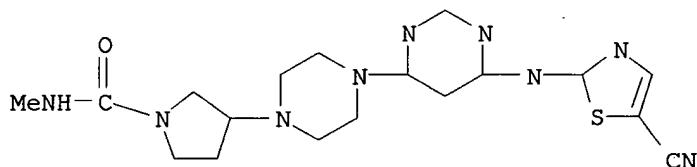
CN 5-Thiazolecarbonitrile, 2-[[6-[4-[2-(2-oxo-1-imidazolidinyl)ethyl]-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-49-9 CAPLUS

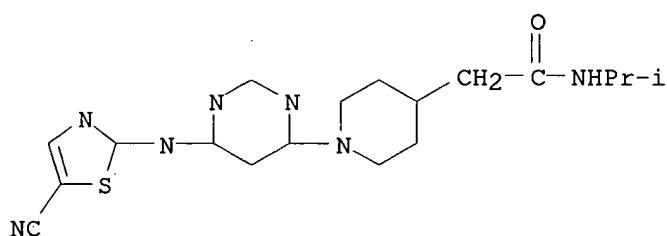
CN 1-Pyrrolidinecarboxamide, 3-[4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-1-piperazinyl]-N-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-50-2 CAPLUS

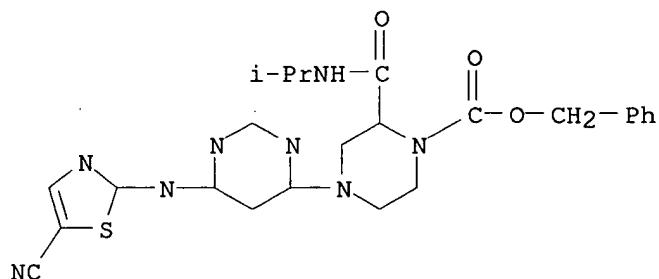
CN 4-Piperidineacetamide, 1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-51-3 CAPLUS

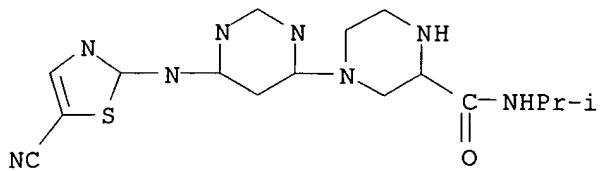
CN 1-Piperazinecarboxylic acid, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-2-[(1-methylethyl)amino]carbonyl-, phenylmethyl ester (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-52-4 CAPLUS

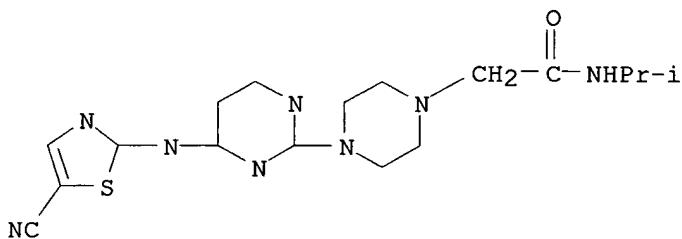
CN 2-Piperazinecarboxamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-53-5 CAPLUS

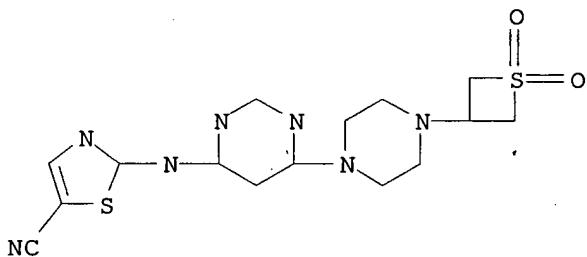
CN 1-Piperazineacetamide, 4-[4-[(5-cyano-2-thiazolyl)amino]-2-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-54-6 CAPLUS

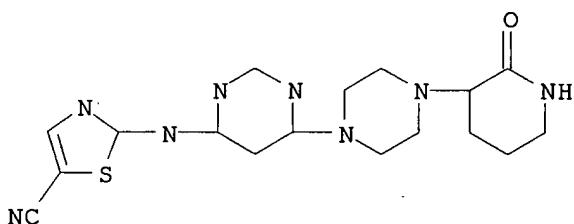
CN 5-Thiazolecarbonitrile, 2-[[6-[4-(1,1-dioxido-3-thietanyl)-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-55-7 CAPLUS

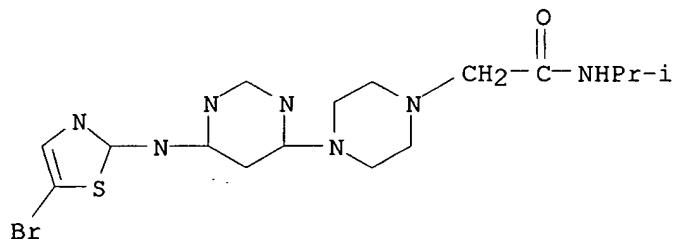
CN 5-Thiazolecarbonitrile, 2-[[6-[4-(2-oxo-3-piperidinyl)-1-piperazinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-56-8 CAPLUS

CN 1-Piperazineacetamide, 4-[6-[(5-bromo-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

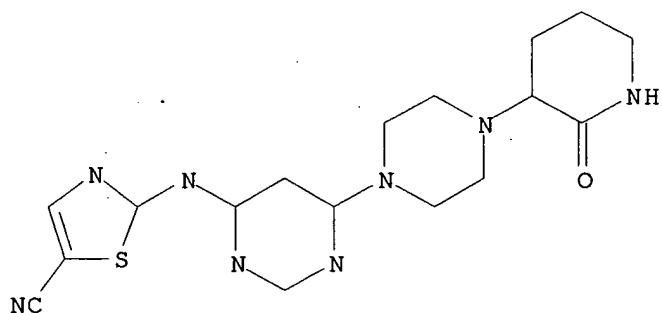


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-57-9 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[4-(2-oxo-3-piperidinyl)-1-piperazinyl]-4-pyrimidinyl]amino]-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

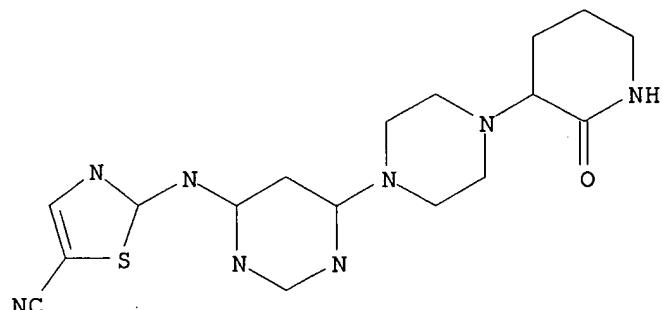


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-58-0 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-[4-(2-oxo-3-piperidinyl)-1-piperazinyl]-4-pyrimidinyl]amino]-, (-)- (9CI) (CA INDEX NAME)

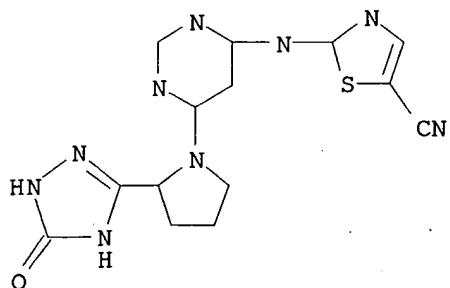
Rotation (-).



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-59-1 CAPLUS

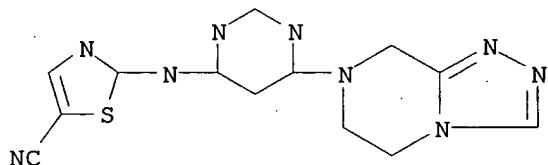
CN 5-Thiazolecarbonitrile, 2-[[6-[2-(2,5-dihydro-5-oxo-1H-1,2,4-triazol-3-yl)-1-pyrrolidinyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-60-4 CAPLUS

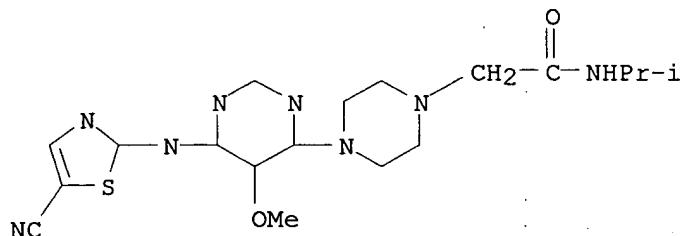
CN 5-Thiazolecarbonitrile, 2-[[6-(5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-61-5 CAPLUS

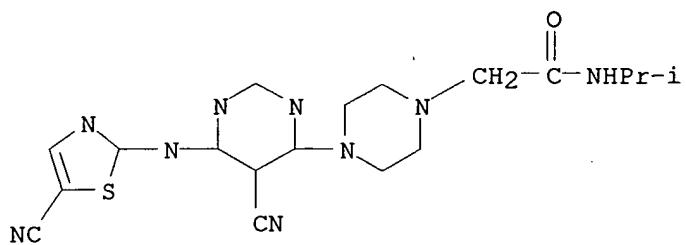
CN 1-Piperazineacetamide, 4-[6-[(5-cyano-2-thiazolyl)amino]-5-methoxy-4-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-62-6 CAPLUS

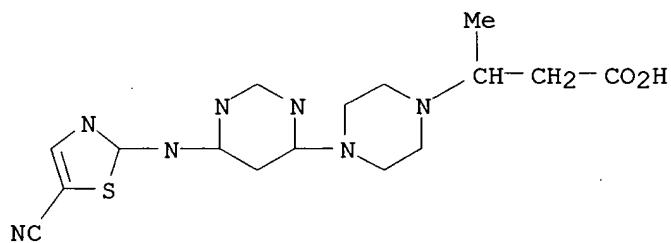
CN 1-Piperazineacetamide, 4-[5-cyano-6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-63-7 CAPLUS

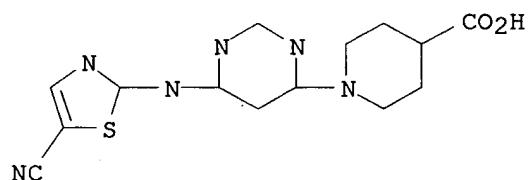
CN 1-Piperazinepropanoic acid, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-β-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-64-8 CAPLUS

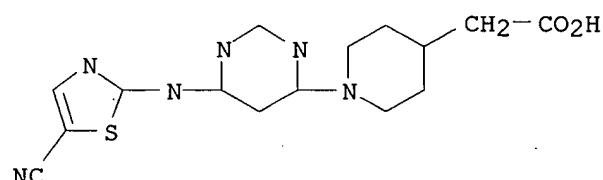
CN 4-Piperidinecarboxylic acid, 1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-65-9 CAPLUS

CN 4-Piperidineacetic acid, 1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

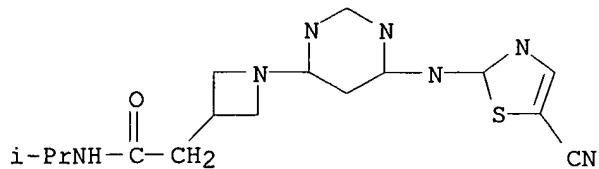


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-66-0 CAPLUS

CN 3-Azetidineacetamide, 1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-N-

(1-methylethyl)- (9CI) (CA INDEX NAME)

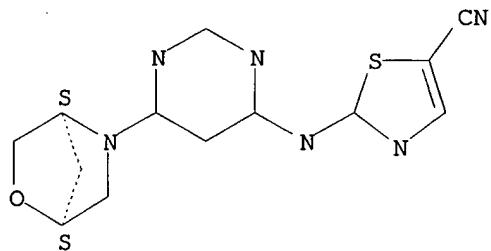


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-67-1 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[[6-(1S,4S)-2-oxa-5-azabicyclo[2.2.1]hept-5-yl-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

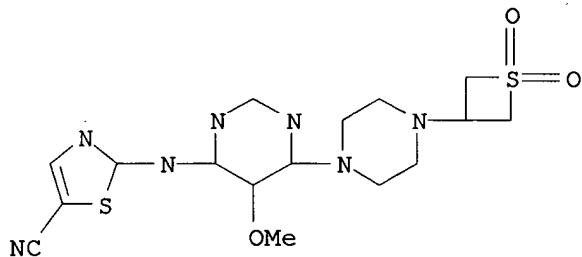
Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-68-2 CAPLUS

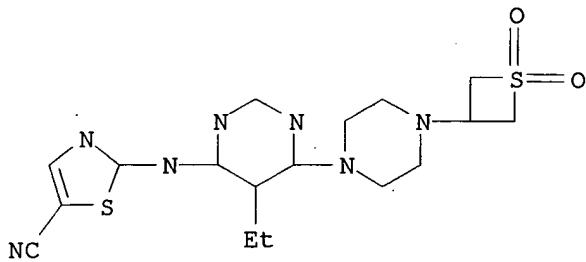
CN 5-Thiazolecarbonitrile, 2-[[6-[4-(1,1-dioxido-3-thietanyl)-1-piperazinyl]-5-methoxy-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-69-3 CAPLUS

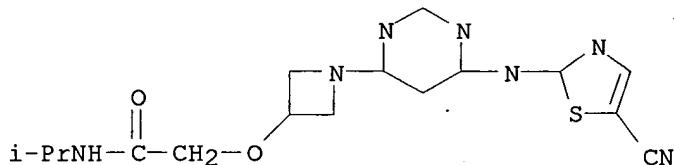
CN 5-Thiazolecarbonitrile, 2-[[6-[4-(1,1-dioxido-3-thietanyl)-1-piperazinyl]-5-ethyl-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-70-6 CAPLUS

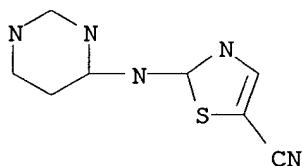
CN Acetamide, 2-[(1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-3-azetidinyl)oxy]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436852-19-6 CAPLUS

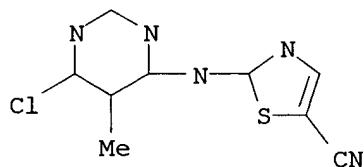
CN 5-Thiazolecarbonitrile, 2-(4-pyrimidinylamino)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436852-24-3 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-chloro-5-methyl-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

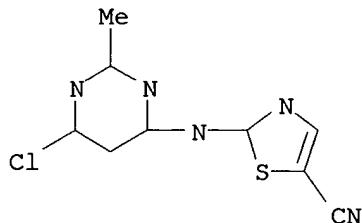
IT 436852-23-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pyrimidinylaminothiazoles as tyrosine kinase inhibitors)

RN 436852-23-2 CAPLUS

CN 5-Thiazolecarbonitrile, 2-[(6-chloro-2-methyl-4-pyrimidinyl)amino]- (9CI)  
(CA INDEX NAME)



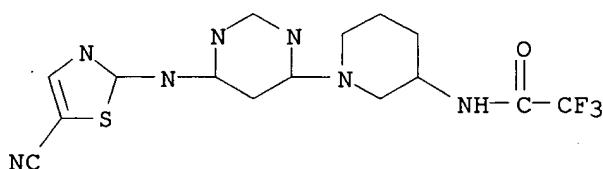
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT 436851-77-3P 436851-81-9P 436851-92-2P  
436851-98-8P 436851-99-9P 436852-13-0P  
436852-16-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation of pyrimidinylaminothiazoles as tyrosine kinase inhibitors)

RN 436851-77-3 CAPLUS

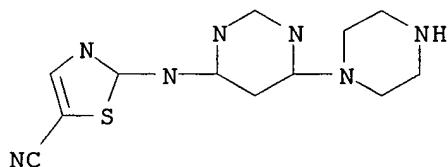
CN Acetamide, N-[1-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]-3-piperidinyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-81-9 CAPLUS

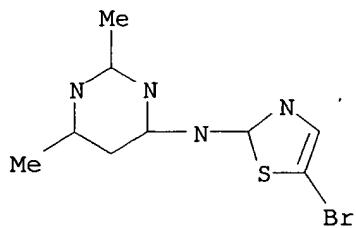
CN 5-Thiazolecarbonitrile, 2-[(6-(1-piperazinyl)-4-pyrimidinyl)amino]- (9CI)  
(CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-92-2 CAPLUS

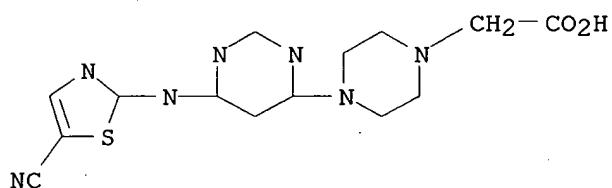
CN 4-Pyrimidinamine, N-(5-bromo-2-thiazolyl)-2,6-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-98-8 CAPLUS

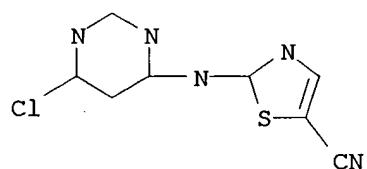
CN 1-Piperazineacetic acid, 4-[6-[(5-cyano-2-thiazolyl)amino]-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436851-99-9 CAPLUS

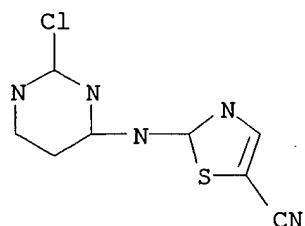
CN 5-Thiazolecarbonitrile, 2-[(6-chloro-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436852-13-0 CAPLUS

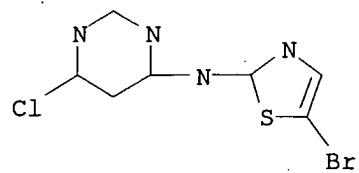
CN 5-Thiazolecarbonitrile, 2-[(2-chloro-4-pyrimidinyl)amino]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 436852-16-3 CAPLUS

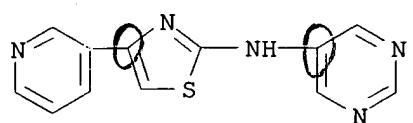
CN 4-Pyrimidinamine, N-(5-bromo-2-thiazolyl)-6-chloro- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2001:661420 CAPLUS  
 DN 135:226987  
 TI Preparation of 2,4-disubstituted thiazoles for the prevention or the treatment of diseases mediated through cytokines  
 IN Love, Christopher; Van Wauwe, Jean Pierre Frans; De Brabander, Marc; Cooymans, Ludwig; Vandermaesen, Nele; Kennis, Ludo Edmond Josephine  
 PA Janssen Pharmaceutica N.V., Belg.  
 SO PCT Int. Appl., 100 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001064674	A1	20010907	WO 2001-EP101841	20010220
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2397661	AA	20010907	CA 2001-2397661	20010220
	EP 1261607	A1	20021204	EP 2001-909776	20010220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003525291	T2	20030826	JP 2001-563514	20010220
	US 2003203897	A1	20031030	US 2002-220350	20020829
PRAI	EP 2000-200733	A	20000301		
	WO 2001-EP1841	W	20010220		
OS	MARPAT 135:226987				
AB	The title compds. [I; Q = (un)substituted cycloalkyl, Ph, naphthyl, etc.; L = (un)substituted Ph, 5-6 membered heterocyclic ring, bicyclic heterocyclic ring] and their pharmaceutically acceptable addition salts, useful for the prevention or the treatment of diseases mediated through cytokines (data given for TNF $\alpha$ and IL-12 inhibition) or diseases mediated through activation of the adenosine A3 receptor (no data given), were prepared E.g., a multi-step synthesis of I.HCl [Q = 6-(trifluoromethyl)-3-pyridyl; L = imidazo[2,1-b]thiazol-5-yl], was given.				
IT	<b>358779-76-7P</b>				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2,4-disubstituted thiazoles for the prevention or the treatment of diseases mediated through cytokines)				
RN	358779-76-7 CAPLUS				
CN	5-Pyrimidinamine, N-[4-(3-pyridinyl)-2-thiazolyl]-, dihydrobromide (9CI) (CA INDEX NAME)				



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●2 HBr

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/677,687

=> => d his

(FILE 'HOME' ENTERED AT 16:05:28 ON 30 OCT 2005)

FILE 'REGISTRY' ENTERED AT 16:05:38 ON 30 OCT 2005

L1                   STRUCTURE UPLOADED  
L2                   1 S L1 SSS SAM  
L3                   201 S L1 SSS FUL

FILE 'CAPLUS' ENTERED AT 16:06:43 ON 30 OCT 2005

L4                   7 S L3

FILE 'CAOLD' ENTERED AT 16:07:24 ON 30 OCT 2005

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L5                   0 L3

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.43	197.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-5.11

STN INTERNATIONAL LOGOFF AT 16:07:36 ON 30 OCT 2005